
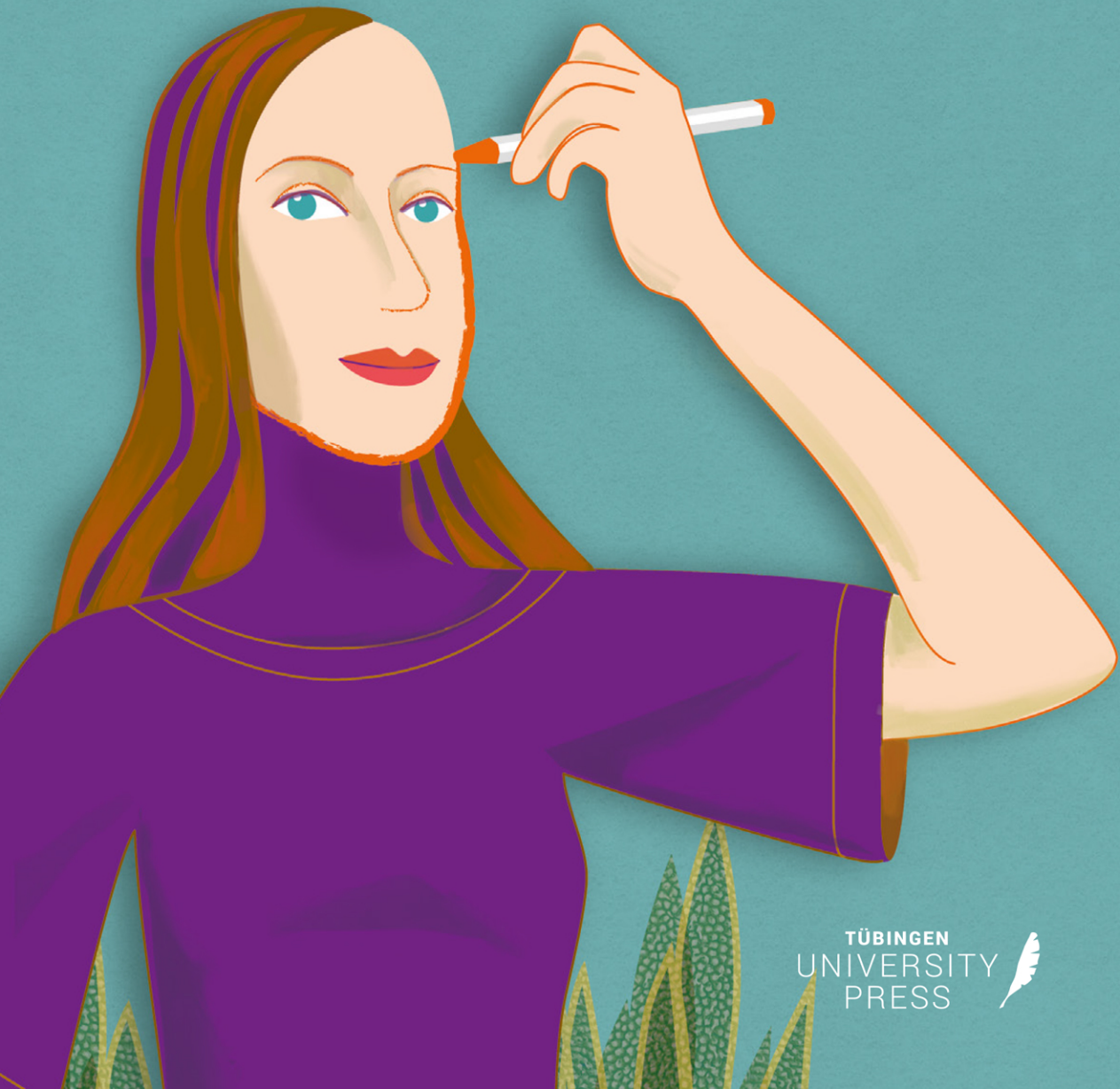


Thomas Vogel

DEVELOPING CREATIVE LITERACY



The long-term
impact of
creativity
training



TÜBINGEN
UNIVERSITY
PRESS



Developing Creative Literacy

The long-term Impact of Creativity Training

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Developing Creative Literacy

Thomas Vogel

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The long-term Impact of Creativity Training

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Dedicated to Günter August Vogel (*1924 - †2024),
who showed me that life can be a long journey filled with many creative possibilities.

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ABSTRACT

of Dissertation presented to the Faculty of Humanities in the Department of Media Studies at the University of Tübingen in partial fulfillment of the requirements for the degree of Doctor of Philosophy

Developing Creative Literacy: The long-term Impact of Creativity Training
By Thomas Günter Vogel
November 2024

There is overall agreement among researchers that creative thinking skills, problem-solving skills, and divergent and convergent thinking skills can be improved through training programs.¹ The short-term impact of creativity trainings has been documented in various studies and students who completed a college-based creativity course demonstrated improved divergent thinking skills,² experienced greater confidence and were able to apply their creative skills outside the classroom.³ Yet, no qualitative studies are available that illustrate any potential long-term impact that might result from the process of learning and practicing creative thinking skills in a creativity course. This study fills this gap and provides new insights into how a 14-week-long creativity course influences the life of people, who completed such a course.

The study explores the long-term impact creativity training can have on students not only right after the course completion but also many years after the course and the training took place. 30 former students who had completed a creative thinking course that I taught at a small liberal arts college on the

1 Ozyaprak, Melodi Keynote Creative Expert Exchange 2024, SUNY Buffalo, February 2023.

2 Im, Hyunjoo, Brad Hokanson, and Kim K. P. Johnson. «Teaching Creative Thinking Skills: A Longitudinal Study.» *Clothing and Textiles Research Journal* 33, no. 2 (April 2015): 129–142. <https://doi.org/10.1177/0887302X15569010>.

3 Meinel, Martin, Wagner, T. F., Baccarella, C. V., & Voigt, K. (2019). Exploring the Effects of Creativity Training on Creative Performance and Creative Self-Efficacy: Evidence from a Longitudinal Study. *The Journal of Creative Behavior*, 53 (4), 546–558. <https://doi.org/10.1002/jocb.234>.

east coast of the United States between 2013 and 2023 participated in this qualitative study that employed a grounded theory method approach using semi-structured open-ended in-depth interviews.

The results of the study demonstrate that for the participants of the study a course focusing on creativity, creative thinking and creative process made a substantive difference and created a long-lasting impact that extends beyond college. Six themes were identified in the research that form a framework called C-SPECD, and illustrate the complexity and inter-connectedness of how humans experience creativity daily in their personal and professional settings. The C-SPECD Framework, consisting of six main themes that have emerged, are as follows:

1. The Conscious Self – Metacognition and Awareness
2. The Creative Self-Identity – Self-Identity and Being Authentic
3. The Self as Process – Creative Process
4. The Socio-Emotional Self – Socio-Emotional Creativity
5. The Collaborative Self – Socio-Ecological Creativity
6. The Developing Self – Creative Possibilities Journey

All six factors represent a number of core skills that can be summarized and described as creative literacy. According to this study, creative literacy can be defined as having a strong sense of one's own creative competencies, having the capacity to collaborate with others, expressing empathy for oneself and others, being open to new things, applying a growth mindset represented by continuous learning, and developing oneself allowing for a rich creative life journey filled with many possibilities. Additionally, creative literacy entails an understanding of the creative process and the separation of creative process and creative product.

The research findings have practical implications for educators and business professionals as well as individuals, who are interested in developing creative skills, advance human development and promote creative literacy, skills, which will be in high demand for many years to come.

EXTENDED ABSTRACT

of Dissertation presented to the Faculty of Humanities in the Department of Media Studies at the University of Tübingen in partial fulfillment of the requirements for the degree of Doctor of Philosophy

Developing Creative Literacy: The long-term Impact of Creativity Training
By Thomas Günter Vogel
November 2024

»For me, my own creativity, I feel it's a journey and it still continues, it never stops. And [creativity] it's one of the rare subjects where you continually learn and you apply the process yourself.« Timothy (Participant in the Study)

INTRODUCTION

During times when artificial intelligence (AI) and large language-based models are threatening to take over and automate certain human cognitive tasks, educators, researchers and business executives are increasingly interested in developing analytical thinking, critical thinking and creative thinking skills in students and employees. The World Economic Forum – Future of Jobs Report 2023 lists creative thinking as the second most important core skill for the future, after analytical thinking. Resilience, flexibility and agility are ranked third, motivation and self-awareness are ranked fourth, curiosity and life-long learning are ranked fifth and empathy and active listening are ranked eighth.⁴ This means that five major skills and capabilities related to creativity

4 World Economic Forum. Future of Jobs Report 2023. 17th ed. WEF Insight Report. Geneva: World Economic Forum, 2023. <https://www.weforum.org/reports/the-future-of-jobs-report-2023/>.

and creative thinking are making the top ten list and have been identified as some of the core skills for workers in the future. Numerous studies confirm that creativity trainings can improve participants' creative performance and increase confidence in their creative abilities.⁵

The findings from this research study validate that the development of those valuable creative thinking skills mentioned above is linked to deliberate creativity training.

There is overall agreement among researchers that creative thinking skills,⁶ problem-solving skills, and divergent and convergent thinking skills can be improved through training programs.⁷ Many different training programs that foster creative thinking skills and particularly divergent thinking skills have been identified.⁸ Successful creativity trainings should include theoretical foundations and practical exercises, and the training programs should be of substantial length and allow participants to apply their newly gained creative thinking skills in real-world applications.⁹

Many effective creativity training programs consist of numerous training sessions, each 0.5–4 hours, spread over a period of 1–3 months.¹⁰ Creativity researchers have also identified particular topics such as the creative process, curiosity, motivation, open-mindedness, risk-taking, emotional awareness,

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- 5 Meinel, Martin, Wagner, T. F., Baccarella, C. V., & Voigt, K. (2019). Exploring the Effects of Creativity Training on Creative Performance and Creative Self-Efficacy: Evidence from a Longitudinal Study. *The Journal of Creative Behavior* 53 (4), 546–558. <https://doi.org/10.1002/jocb.234>.
 - 6 Ozyaprak, Melodi Keynote Creative Expert Exchange 2024, SUNY Buffalo, February 2023.
 - 7 Im, Hyunjoo, Brad Hokanson, and Kim K. P. Johnson. «Teaching Creative Thinking Skills: A Longitudinal Study.» *Clothing and Textiles Research Journal* 33, no. 2 (April 2015): 129–142. <https://doi.org/10.1177/0887302X15569010>.
 - 8 Valgeirsdottir, Dagny, and Balder Onarheim. «Studying Creativity Training Programs: A Methodological Analysis.» *Creativity and Innovation Management* 26, no. 4 (December 2017): 430–439. <https://doi.org/10.1111/caim.12245>.
 - 9 Scott, Ginamarie, Lyle E. Leritz, and Michael D. Mumford. «The Effectiveness of Creativity Training: A Quantitative Review.» *Creativity Research Journal* 16, no. 4 (October 2004): 361–388. https://doi.org/10.1207/s15326934crj1604_1.
 - 10 Valgeirsdottir, Dagny, and Balder Onarheim. «Studying Creativity Training Programs: A Methodological Analysis.» *Creativity and Innovation Management* 26, no. 4 (December 2017): 430–439. <https://doi.org/10.1111/caim.12245>

flexible thinking that can be infused into any classroom setting¹¹ and course subject in order to improve creative thinking skills and creative behavior amongst students.¹²

The short-term impact of creativity trainings has been documented in various studies and students who completed a college-based creativity course demonstrated improved divergent thinking skills,¹³ experienced greater confidence and were able to apply their creative skills outside the classroom.¹⁴ While there are studies available that examine creativity within education,¹⁵ only some long-term studies are available that illustrate how creative thinking training¹⁶ impacts participants' creativity in respect to students' divergent thinking skills.¹⁷ However, no qualitative studies are available that illustrate any potential long-term impact that might result from the process of learning and practicing creative thinking skills in a course. This study fills this gap and provides new insights into how a 14-week-long creativity course impacts the life of people, who completed such a course.

The study explores the long-term impact creativity training, in particular, a college-based course that introduces, teaches and focuses on creative thinking, creativity and creative process, can have on students not only right after the course completion but also many years after the course and the training took place.

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- 11 Burnett, Cyndi, and John Fitzgerald Cabra. *Infusing Creative Thinking into Higher Education*, 2024.
 - 12 Beghetto, Ronald A., and James C. Kaufman. *Nurturing Creativity in the Classroom*. Second edition. *Current Perspectives in Social and Behavioral Sciences*. New York: Cambridge University Press, 2017.
 - 13 Im, Hyunjoo, Brad Hokanson, and Kim K. P. Johnson. «Teaching Creative Thinking Skills: A Longitudinal Study.» *Clothing and Textiles Research Journal* 33, no. 2 (April 2015): 129–142. <https://doi.org/10.1177/0887302X15569010>.
 - 14 Habib, Sabrina, Thomas Vogel and Evelyn Thorne. «Transformational Creative Pedagogy in the Age of AI: A Multiyear Qualitative Analysis Across Universities.» Presentation at The South Oregon University 2024 Annual Creativity Conference, Ashland, OR, May 2024.
 - 15 Beghetto, Ronald A. «Creativity in the Classroom.» In *The Cambridge Handbook of Creativity*, edited by James C. Kaufman and Robert J. Sternberg, 1st ed., 447–464. Cambridge University Press, 2010. <https://doi.org/10.1017/CBO9780511763205.027>.
 - 16 Patston, Timothy J., James C. Kaufman, Arthur J. Cropley, and Rebecca Marrone. «What Is Creativity in Education? A Qualitative Study of International Curricula.» *Journal of Advanced Academics* 32, no. 2 (May 2021): 207–230. <https://doi.org/10.1177/1932202X20978356>.
 - 17 Souza Fleith, Denise de, Joseph S. Renzulli, and Karen L. Westberg. «Effects of a Creativity Training Program on Divergent Thinking Abilities and Self-Concept in Monolingual and Bilingual Classrooms.» *Creativity Research Journal* Vol. 14, Nos. 3 & 4 (2002): 373–386.

In order to assess whether there was a long-term impact of creativity training, former students who had completed a creative thinking course that I taught at a small liberal arts college on the east coast of the United States between 2013 and 2023 were invited to participate in a qualitative study. The study employed a grounded theory method approach using semi-structured in-depth interviews to explore the effects of creativity training. The study included 30 former students whose age ranged from 22 years to 41 years at the time of the interviews. The participants completed a creativity course one year to up to 10 years prior to the time the interviews took place.

The participants represent a diverse group and their respective countries of origin are Honduras, United Kingdom, Nigeria, South Korea, Vietnam, Peru, Trinidad & Tobago, Columbia, Canada, USA, India, China and Venezuela. At the time of the interviews, the participants held professional positions in the following fields: Research, Design, Product Management, Production, Digital Marketing, General Management, Brand Management, Advertising, Account Management, Marketing & Data Analytics, Strategic Planning, Marketing Communication, Sales, Content Creation, Business Development, Creative Direction, and worked in industries such as Entertainment (Gaming), Entertainment (Theater & Arts), Consumer Packaged Goods, Technology, Entertainment (Sports), Consumer Good [Jewelry], Education, Food, Advertising & Marketing, Entertainment (Film, TV, Music), Bio-Tech / Pharmaceutical, Industrial (Energy), Finance, Manufacturing, Media (Publishing and News).

KEY FINDINGS

The results demonstrate that the course that I studied, and which focuses on creative thinking and creative process, makes a substantive difference and creates a long-lasting impact that extends beyond college. The data suggests that a creative thinking course can have a lasting effect that impacts a person's life journey.

The participants of the course expressed that creativity is complex and influenced by many different factors. The study revealed that participants experience their creativity at a very individual and highly personal level. At

the same time, all participants shared that they see themselves and their creativity as part of a complex system and interaction of multiple dimensions related to different aspects of creativity as well as of different facets of themselves, and that their creativity is being affected by society, communities, collaborative teams and individual people, as well as nature and other living beings.

Six themes were identified in the research that form a framework called C-SPECD, and illustrate the complexity and inter-connectedness of how humans experience creativity daily in their personal and professional settings. A strong correlation has been found between the creative thinking course and the six key factors representing several core skills, attributes and traits related to creative thinking, the creative process and creativity. A detailed description and analysis of the six key themes is provided in chapter five of the dissertation.

In combination, the six key core skills allow individuals to use creativity as a powerful tool and also confirm that creativity represents a powerful resource within ourselves that leads to a strong creative self-identity.

The C-SPECD Framework, consisting of six main themes that have emerged, are as follows:

1. The Conscious Self – Metacognition and Awareness
2. The Creative Self-Identity – Self-Identity and Being Authentic
3. The Self as Process – Creative Process
4. The Socio-Emotional Self – Socio-Emotional Creativity
5. The Collaborative Self – Socio-Ecological Creativity
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All six factors represent a number of core skills that can be summarized and described as creative literacy. According to this study, creative literacy can be defined as having a strong sense of one's own creative competencies, having the capacity to collaborate with others, expressing empathy for oneself and others, being open to new things, applying a growth mindset represented by continuous learning, and developing oneself allowing for a rich creative life journey filled with many possibilities. Additionally, creative literacy entails an understanding of the creative process and the separation of creative process and creative product.

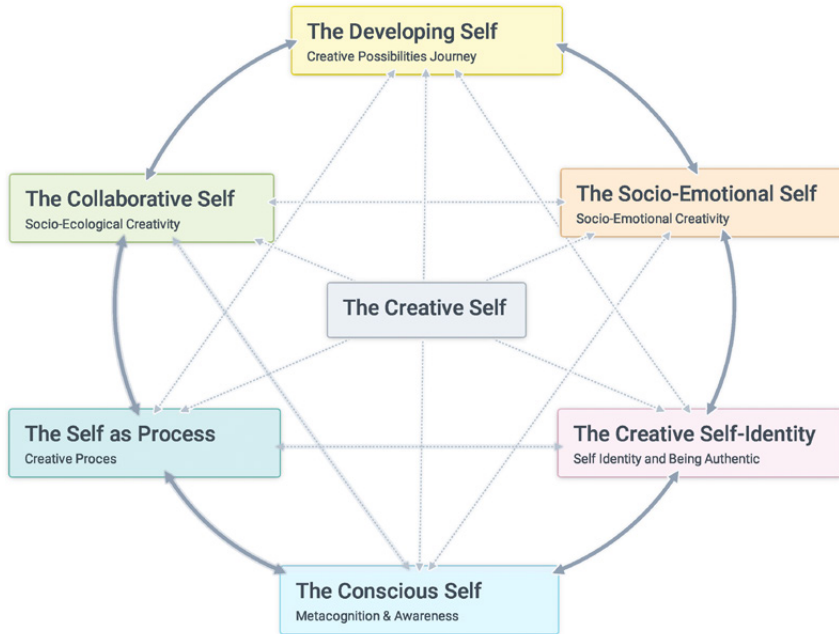


Figure 0-1: The C-SPECD Framework illustrating Six Dimensions of Creative Literacy

The results from this research study demonstrate a strong connection to the highly demanded core skills described in the World Economic Forum - Future of Jobs Report 2023¹⁸ and support many of the concepts¹⁹ and pedagogies recommended for creative teaching and teaching creativity.²⁰

The research findings have practical implications for educators and business professionals as well as individuals, who are interested in developing creative skills, advance human development and promote creative literacy, skills, which will be in high demand for many years to come.

18 World Economic Forum. *Future of Jobs Report 2023*. 17th ed. WEF Insight Report. Geneva: World Economic Forum, 2023. <https://www.weforum.org/reports/the-future-of-jobs-report-2023/>.

19 Burnett, Cyndi, and John Fitzgerald Cabra. *Infusing Creative Thinking into Higher Education*, 2024.

20 Beghetto, Ronald A., and James C. Kaufman. *Nurturing Creativity in the Classroom*. Second edition. *Current Perspectives in Social and Behavioral Sciences*. New York: Cambridge University Press, 2017.

CHAPTER ONE: INTRODUCTION

MY PERSONAL HISTORY

My personal journey into creativity began several decades ago when I was exposed to applied creativity during my undergraduate studies in media technology and engineering at the Stuttgart Media University, as well as during my graduate studies in media and communication design at the Academy of Fine Arts in Stuttgart, Germany.

In the early 1990s, while I was a professor of media design at the University of Applied Sciences in Wiesbaden, I attended the Creative Problem-Solving Institute (CPSI), which is part of the Creative Education Foundation (CEF) in Buffalo. CPSI was founded by the advertising executive and creativity enthusiast Alex F. Osborn and university professor Sidney J. Parnes, Ph.D., who together developed the Osborn-Parnes Creative Problem-Solving (CPS) process based on Osborn's brainstorming techniques. Over several years, I participated in numerous CPSI workshops and seminars and received training and certificates in the facilitation of the creative problem solving (CPS) process and creative leadership. From 1993 until 2002, I taught creative concept development and creative thinking for undergraduate students majoring in media management.

Upon accepting a professorship at Emerson College in Boston in 2002 I began a research agenda that focused on advertising creativity. Soon after arriving at Emerson College, I developed new undergraduate and graduate courses that focused on creativity, creative thinking and creative process and I started teaching creativity courses in higher education in the United States.

Studying creativity and having taught creativity, creative problem solving and creative processes for more than two decades led to the development of a framework that outlines key aspects derived from academic literature and research that I considered helpful for the construction of an undergraduate course called Breakthrough Thinking and a graduate course called Creative Thinking and Problems Solving that I have been teaching at Emerson College for more than two decades.

Much of my teaching experience and insights gained from researching advertising creativity and analyzing top-performing creative advertising agencies in the US led to the writing of the book *Breakthrough Thinking Creative Thinking – A Guide to Creative Thinking and Idea Generation* published in 2014 by How Design.

While the creativity courses I initially taught have been centered around the traditional creativity 4 P model – Person, Process, Place and Product developed by Rhodes,¹ several additional aspects and newer concepts of creativity, such as Kaufman's and Beghetto's 4 Cs, Richards' Everyday Creativity, Lubart's 7 Cs and Glăveanu's 5 As, have been added to the course syllabi during the last 10 years. Additionally, I had added particular activities and readings related to meditation, and mindfulness in order to incorporate a more holistic approach to exposing students to creativity. While iterating the course structure and content on an ongoing basis, I have also turned my own teaching style upside down and switched from a traditional teaching model, and the typical use of lectures, towards empowering students to take responsibility for their own learning, and allowing students to experience their own creativity and allowing them to be in charge. This includes students' input when doing specific exercises and group work and having a say in the when and how we are engaging in some of the creative activities.

The various alterations and adaptations I have accomplished to accommodate both, new content and a revised pedagogical approach, resulted in a change of my role and switching from being a teacher to becoming more of a guide, mentor and chief navigator of an expedition.

Based on these changes in my pedagogical approach to teaching creativity, creative and critical thinking, problem-solving and creative process, the student feedback started to take on a new direction. 15 years ago, most of my students reacted very positive to the overall course experience but focused on the tools and new concepts they had been exposed to and learned, such as learning how to apply brainstorming and divergent thinking tools (Random Input, Scamper, Reversal, Six Thinking Hats, Methods of Analysis).² The feedback then focused very much on the practical application of the creative

1 Rhodes, Mel. »An Analysis of Creativity.« *The Phi Delta Kappan* 42, no. 7 (1961): 305–310.

2 Vogel, Thomas. *Breakthrough Thinking: A Guide to Creative Thinking and Idea Generation*. 1st ed. Cincinnati, Ohio: How Books, 2014.

tools and the redefining what creativity means at their personal and individual level.

During the last decade and since some of the new course content and pedagogy had been implemented, my former students shared comments and provided feedback after the completion of the creative thinking course MK342 Breakthrough Thinking indicating that some change in their thinking had occurred over the course of the 14 weeks and that some of the newly acquired skills were applicable in their personal lives. One former student mentioned

»In the beginning of the class I only thought of myself as being creative in certain contexts, for example I thought I was creative because I paint. The course opened my eyes to see that I am creative in every single area of my life.«³

Another former student said

»I did not believe I was creative. This class has made me see that creativity can in fact be trained, and I have found a new motivation to keep up with the training myself because I now know I am creative.«⁴

The feedback from more than 100 students provided evidence that students benefit from having taking a creativity course and seems to be in line with the findings of other researchers, who have demonstrated that teaching for creativity can lead to the improvement of students' creative thinking and behavior, particularly amongst young people.⁵

3 Habib, Sabrina, Thomas Vogel and Evelyn Thorne. »Transformational Creative Pedagogy in the Age of AI: A Multiyear Qualitative Analysis Across Universities.« Presentation at The South Oregon University 2024 Annual Creativity Conference, Ashland, OR, May 2024.

4 Habib, Sabrina, Thomas Vogel and Evelyn Thorne. »Transformational Creative Pedagogy in the Age of AI: A Multiyear Qualitative Analysis Across Universities.« Presentation at The South Oregon University 2024 Annual Creativity Conference, Ashland, OR, May 2024.

5 Jeffrey, Bob, and Anna Craft. »Teaching Creatively and Teaching for Creativity: Distinctions and Relationships.« *Educational Studies* 30, no. 1 (March 2004): 77–87. <https://doi.org/10.1080/0305569032000159750>.

In recent years, my students' feedback at the end of the semester has provided evidence that in addition to previously mentioned learning outcomes related to creativity concepts and thinking strategies, the course opened up an even more personal experience. Apparently, the creativity course seems to affect students at the core of their inner personal lives, attitudes and newly gained insights into experiencing and seeing the world and their surroundings with new eyes and from different perspectives, gaining self-confidence and learning how to continue practicing rituals and activities that can be practiced outside a classroom environment on a regular basis.

For example, one student mentioned that creativity can happen every day and the concept is no longer exclusively tied to the arts, as she said:

»I now understand that most of us are being creative in our everyday lives without even realizing it. Being a creative person doesn't necessarily mean that you have to stand out from the crowd in the world of the arts, but it also means viewing your life in a different perspective each day.«⁶

Another student pointed out that creativity is connected to expressing emotions and honoring diversity:

»Creativity allows us to feel safe and express our emotions, while also motivating us to ignore our feelings once in a while and step out of our comfort zone. Creativity honors and understands the importance of diversity, and appreciates the new outcomes it brings to the table.«⁷

Additionally, former students, whom I have been in touch with after graduation, mentioned during multiple occasions such as alumni panel discussions,

6 Habib, Sabrina, Thomas Vogel and Evelyn Thorne. »Transformational Creative Pedagogy in the Age of AI: A Multiyear Qualitative Analysis Across Universities.« Presentation at The South Oregon University 2024 Annual Creativity Conference, Ashland, OR, May 2024.

7 Habib, Sabrina, Thomas Vogel and Evelyn Thorne. »Transformational Creative Pedagogy in the Age of AI: A Multiyear Qualitative Analysis Across Universities.« Presentation at The South Oregon University 2024 Annual Creativity Conference, Ashland, OR, May 2024.

individual meetings and guest lectures that they still remember the creativity course and that many are still practicing their individual creativity and that the course seems to have had an impact long after having taken the creativity course. It appeared that for several former students the impact of the creativity course lasted beyond graduating from college.

One of my former students commented on his course experience five months after the completion of the creativity course and summarized his personal experience by pointing out that creativity is something special and highly individual. He said:

»Creativity is a combination of your passion, imagination, goals and situation. How you are, the way you approach, the way you live, the way you are. It's how much you believe creativity of the word means to you. How much I live it out, how much you decide to think what's creative and what's not creative. It's a way, it's a thought process to think to do something different from the norm, when it's meant to happen. It's a way to break the rules, to the extent that you believe you are doing so. Creativity is how you decide to live your life. It's how you decide to be.«⁸

Based on the personal feedback I have been receiving from my students after the course and based on my personal identification with Rhodes' comment about practicing an ongoing interest in exploring the nature of creativity,⁹ as well as the limited available evidence related to the long-term impact of creativity trainings, I am investigating the process when and how a human subject experiences the subject creativity during a formal creativity training such as a 14-week long college course that focuses on creative thinking, creativity and creative process and teaches for creativity.

My particular interest lies in the investigation what happens after someone took a creativity course. Does anyone remember the creativity frameworks developed by the most famous creativity researchers and applies them

8 Vogel, Thomas and Padhaye, Jasraj. YesNoMaybe, Documentary Film, 2018.

9 Rhodes, Mel. »An Analysis of Creativity.« The Phi Delta Kappan 42, no. 7 (1961): 305–310. <http://www.jstor.org/stable/20342603>.

in their personal and professional lives or could there be something more, something that, at the core, lies in the heart of being human and experiencing oneself in a new way.

While creativity, creative process and creative thinking skills are enormously important and have been expressed by many as an essential capability living in an ever-growing world that is and will be impacted by AI and generative learning systems, this dissertation explores the process of »Developing Creative Literacy: The long-term Impact of Creativity Training.«

This study fills a gap within creativity research and seeks to provide new insights into if and how a 14-week-long creativity course might impact the life of people, who completed such a course. The study explores the perceived long-term impact creativity trainings, in particular, a college-based course that introduces, teaches and focuses on creative thinking, creativity and creative process, can have on students in their personal and professional lives long after they left the college environment.

CHAPTER TWO: LITERATURE REVIEW

During times when artificial intelligence (AI) and large language-based models are threatening to automate certain human cognitive tasks, educators, researchers and business executives are increasingly interested in developing analytical thinking, critical thinking and creative thinking skills in students and employees. The World Economic Forum - Future of Jobs Report 2023 lists creative thinking as the second most important core skill for the future, after analytical thinking. Resilience, flexibility and agility are ranked third, motivation and self-awareness are ranked fourth, curiosity and life-long learning are ranked fifth and empathy and active listening are ranked eighth.¹ This means that five major skills and capabilities related to creativity and creative thinking are making the top ten list and have been identified as some of the core skills for workers in the future.

According to author and futurist Bernard Marr, creativity, collaboration and working in teams, curiosity and continual learning are among the »20 skills and competencies everyone needs to succeed in a digital world« in the future.² Markauskaite et al. recommend training and development of creative skills in order to better prepare humans for the growing interaction and collaboration with artificial intelligence and large language model-based systems in business settings.³

While creativity has been researched for decades, the number of scholarly articles related to creativity research has grown exponentially over the last 20 years, and the nature of creativity research has become more interdisciplinary and the growing interest in topics such as creativity within education

1 World Economic Forum. Future of Jobs Report 2023. 17th ed. WEF Insight Report. Geneva: World Economic Forum, 2023. <https://www.weforum.org/reports/the-future-of-jobs-report-2023/>.

2 Marr, Bernard. Future Skills: The 20 Skills and Competencies Everyone Needs to Succeed in a Digital World. Hoboken, NJ: Wiley, 2022.

3 Markauskaite, Lina, Rebecca Marrone, Oleksandra Poquet, Simon Knight, Roberto Martinez-Maldonado, Sarah Howard, Jo Tondeur, et al. »Rethinking the Entwinement between Artificial Intelligence and Human Learning: What Capabilities Do Learners Need for a World with AI?« Computers and Education: Artificial Intelligence 3 (2022): 100056. <https://doi.org/10.1016/j.caeai.2022.100056>.

has generated new insights.⁴ In addition to traditional research topics related to cognitive, social and developmental psychology, divergent thinking, cognition, thinking styles, creative potential and the traditional 4 P, 5 P and 6 P creativity framework of process, place, press, product and persuasion,⁵ new fields within creativity research have emerged, looking at creativity from the perspective of everyday creativity, the creative economy, human possibilities, as well as how creativity is intertwined with higher education.

In 2021, creativity researchers and educators Burnett and Worwood started *Fueling Creativity in Education*, a podcast focusing on creativity research and its implications for education. The podcast features internationally renowned creativity researchers and connects key findings and insights to the field of education. As creativity in education is being researched more and new knowledge is being created, there is a greater interest in learning about how creativity and creative thinking skills can be taught and what kind of outcomes creativity training can accomplish in students.⁶

Creativity researchers have studied the impact of creativity trainings and identified various benefits of creativity training in young children, adolescents and college students.⁷ There is overall agreement among researchers that creative thinking skills, problem-solving skills, and divergent and convergent thinking skills as well as idea generation, fluency, flexibility and originality can be improved through training programs.⁸ In particular, the creative process, curiosity, motivation, open-mindedness, risk-taking, emotional awareness and flexible thinking have been identified as topics that can be infused into any classroom setting and course subject in order to improve creative thinking skills and creative behavior amongst students.⁹

4 Hernández-Torrano, Daniel, and Laura Ibrayeva. »Creativity and Education: A Bibliometric Mapping of the Research Literature (1975–2019).« *Thinking Skills and Creativity* 35 (March 2020): 100625. <https://doi.org/10.1016/j.tsc.2019.100625>.

5 Mark Runco, Keynote Address at SOU Creativity Conference, Ashland, OR, 5/21/2023.

6 Burnett, Cyndi, and Matthew Worwood. »Fueling Creativity in Education,« n.d. <https://fuelingcreativity.podbean.com/>.

7 Ozyaprak, Melodi, Keynote Creative Expert Exchange 2024, SUNY Buffalo, February 2023.

8 Im, Hyunjoo, Brad Hokanson, and Kim K. P. Johnson. »Teaching Creative Thinking Skills: A Longitudinal Study.« *Clothing and Textiles Research Journal* 33, no. 2 (April 2015): 129–142. <https://doi.org/10.1177/0887302X15569010>.

9 Burnett, Cyndi, and John Fitzgerald Cabra. *Infusing Creative Thinking into Higher Education*, 2024; Beghetto, Ronald A., and James C. Kaufman. *Nurturing Creativity in the*

Many different training programs that foster creative thinking skills and particularly divergent thinking skills have been identified.¹⁰ Numerous studies confirm that creativity trainings can improve participants' creative performance and increase confidence in their creative abilities.¹¹ Successful creativity trainings should include theoretical foundations and practical exercises, and the training programs should be of substantial length and allow participants to apply their newly gained creative thinking skills in real-world applications.¹²

The short-term impact of creativity trainings has been documented in various studies and students who completed a college-based creativity course demonstrated improved divergent thinking skills,¹³ experienced greater confidence and were able to apply their creative skills outside the classroom.¹⁴ A few studies in specific areas like engineering and retail management have explored some longer-term effects of creativity training and confirmed that the improvement of divergent thinking skills lasted over multiple years.¹⁵

However, few qualitative long-term studies are available that illustrate how creative thinking training impacts participants' creativity beyond the

Classroom. Second edition. Current Perspectives in Social and Behavioral Sciences. New York: Cambridge University Press, 2017.

- 10 Valgeirsdottir, Dagny, and Balder Onarheim. »Studying Creativity Training Programs: A Methodological Analysis.« *Creativity and Innovation Management* 26, no. 4 (December 2017): 430–439. <https://doi.org/10.1111/caim.12245>.
- 11 Meinel, Martin, Wagner, T. F., Baccarella, C. V., & Voigt, K. (2019). Exploring the Effects of Creativity Training on Creative Performance and Creative Self-Efficacy: Evidence from a Longitudinal Study. *The Journal of Creative Behavior*, 53 (4), 546–558. <https://doi.org/10.1002/jocb.234>.
- 12 Scott, Ginamarie, Lyle E. Leritz, and Michael D. Mumford. »The Effectiveness of Creativity Training: A Quantitative Review.« *Creativity Research Journal* 16, no. 4 (October 2004): 361–388. https://doi.org/10.1207/s15326934crj1604_1.
- 13 Im, Hyunjoo, Brad Hokanson, and Kim K. P. Johnson. »Teaching Creative Thinking Skills: A Longitudinal Study.« *Clothing and Textiles Research Journal* 33, no. 2 (April 2015): 129–142. <https://doi.org/10.1177/0887302X15569010>.
- 14 Habib, Sabrina, Thomas Vogel and Evelyn Thorne. »Transformational Creative Pedagogy in the Age of AI: A Multiyear Qualitative Analysis Across Universities.« Presentation at The South Oregon University 2024 Annual Creativity Conference, Ashland, OR, May 2024.
- 15 Im, Hyunjoo, Hokanson, B., and Johnson, K. K. P. (2015). Teaching Creative Thinking Skills: A Longitudinal Study. *Clothing and Textiles Research Journal*, 33 (2): 129–142. <https://doi.org/10.1177/0887302X15569010>.

aspects of divergent thinking skills. Additionally, few qualitative studies are available that illustrate what happens during and after the process of learning and practicing creative thinking skills in a course, and there is little known about the long-term impact of creativity trainings years after the initial training took place.

Rhodes wrote

»My appeal is that as educators we recognize the importance of continuing our interest in the nature of creativity, that we be appreciative of the spade work that has been done in the decade just past, that we continue to identify the factors associated with the creative process, and above all that we do not throw out the baby with the bath water just because the water is cloudy.«¹⁶

With my study, I investigated if creativity training, particularly a semester-long college course focusing on creativity, might have any perceived long-term impact on former students. The specific creativity course that the participants of this study experienced covered various aspects of creativity. While the course explored how creativity happens and is experienced at the personal and individual level, the course also introduced the creative process, environmental and cultural factors, creative collaboration and introduced several creativity frameworks developed by well-known creativity researchers.

Since the course content draws from a wide area of creativity related subjects that have emerged in the creativity literature, I will review the following creativity-related themes: Creativity, The Creative Person, The Creative Self and Self-Efficacy, Metacognition, The Creative Process, Socio-Emotional Creativity, Sociocultural Creativity, The Creative Experience, Creativity and Systems, Everyday Creativity, Creativity and the Possible, Creativity and Education, Teaching Creatively and Teaching for Creativity and Creative Literacy.

16 Rhodes, Mel. »An Analysis of Creativity.« *The Phi Delta Kappan* 42, no. 7 (1961): 305–310. <http://www.jstor.org/stable/20342603>.

CREATIVITY

As long as humans have existed there has been creativity. Societies during various times in history have approached creativity from different perspectives and placed value based on societal norms and according to gatekeepers of specific domains and those in power.¹⁷ Humans applied creativity while discovering fire, developing new tools for hunting, inventing the wheel and other technological advances as well as creating artworks and making artifacts long before creativity became a subject of rigorous study. Creativity has been researched for over 100 years but many experts agree that a real explosion of creativity research started after J.P. Guilford's¹⁸ first address as newly elected president of the American Psychological Association during the annual meeting at the Pennsylvania State College in 1950. Although one event can hardly be responsible for all the future creativity research that followed in the 50s and 60s of the 20th century, the time was ripe for an expansion of psychological research that focused more on behavioral science than during the previous decades.¹⁹

Creativity represents a complex field and is influenced by many factors. Defining creativity is almost as multifaceted as creativity itself and researchers have approached defining creativity from various angles and perspectives. The field of creativity research first started with a person-centered approach, when predominantly psychologists researched individuals whose personality traits, human characteristics, thinking styles and creative activities were researched initially. Rhodes argued that creativity is complex and requires mental activities also known as processes that often include the capacity of thinking divergently. Rhodes associated creativity with ideas or products that relate to a mental process involving divergent thinking leading to some outcome or production. Additionally, Rhodes argued that the person who creates and develops ideas is being influenced by the environment, society and external factors as no one lives in a vacuum and is constantly learning from their sur-

17 Csikszentmihalyi, Mihaly. *Creativity: Flow and the Psychology of Discovery and Invention*. New York: Harper, 2010.

18 Guilford, J. Paul (1950). *Creativity*. *American Psychologist* 5, 444–454.

19 Sawyer, R. Keith. *Explaining Creativity: The Science of Human Innovation*, Oxford University Press USA – OSO, 2012. ProQuest Ebook Central, <http://ebookcentral.proquest.com/lib/emerson/detail.action?docID=886582>.

roundings. Therefore, judgment of the creative product or evaluation of the thought processes leading to the creative product takes place. Acknowledging these relationships between the creator, the thought process, the creative product and external factors, Rhodes proposed the 4 P creativity framework person, process, press and product.²⁰

Rhodes' 4 P creativity framework has influenced creativity researchers for decades and still provides an important context when looking into the growing complexity of the topic. As creativity research has grown exponentially during the last decade, a new body of creativity research has emerged world-wide. While the history of defining creativity can be dated back to Shakespeare, Bethune, Barron and Guilford,²¹ Runco and Jaeger reiterate that the standard definition of creativity »requires both originality and effectiveness.«²² Originality is associated with newness, novelty, not-seen-before and other elements of surprise, divergence, something different from the norm and being average or commonly found.²³

Creativity can happen in all disciplines and is often marked by a second major criterion - that humans can use and apply the outcome of creative productions and deem it valuable. These two components are particularly important and related to the economic benefit of creations when creators can claim credit and copyright for their work that is protected by international laws allowing the creator to gain monetary benefits when their creative products are being purchased and valued from a monetary perspective. Novelty and effectiveness therefore have major implications in terms of economic value creation. According to Lubart and Thornhill-Miller »creativity refers to original thinking that leads to new productions that have value in their social context«²⁴ and incorporates a multitude of different thinking styles includ-

20 Rhodes, Mel (1961). An analysis of creativity. *The Phi Delta Kappan*, 42 (7), 305–310.

21 Guilford, J. Paul (1950). Creativity. *American Psychologist* 5, 444–454.

22 Runco, Mark A. Positive, Creativity and the Intentions, Discretion, Problem Finding, and Divergent Thinking That Support It Can Be Encouraged in the Classroom. *Educ. Sci.* 2022, 12, 340. <https://doi.org/10.3390/educsci12050340>.

23 Guilford, J. Paul. *The Nature of Human Intelligence*. McGraw-Hill Series in Psychology. McGraw-Hill, 1967.

24 Lubart, Todd, and Branden Thornhill-Miller. »Creativity: An Overview of the 7C's of Creative Thought.« *The Psychology of Human Thought*, 2019. <https://doi.org/10.17885/HEIUP.470.C6678>.

ing anything that goes through our mind, might it be conscious or subconscious.²⁵ Lubart and Thornhill-Miller developed the framework of the 7 C's of creativity and address many aspects of creativity that emerged within the field of creativity research during the last three decades: Creators (person-centered characteristics), Creating (the creative process), Collaborations (co-creating), Contexts (environmental conditions), Creations (the nature of creative work), Consumption (the adoption of creative products) and Curricula (the development and enhancement of creativity).²⁶ Unlike early creativity researchers who focused on investigating the lives of highly creative people such as Picasso, Mozart, Marie Curie and others, Lubart and Thornhill-Miller expand their framework and consider every human who engages in thinking as a creator.²⁷ Although the authors acknowledge that there are humans who engage professionally in creative acts such as writers, artists, composers, musicians, they argue that lawyers, accountants, pilots and others engage in creative thought in professional settings as well as and demonstrate their creativity in daily activities unrelated to work.

THE CREATIVE PERSON

Every person is born with creative capabilities allowing them to experience situations and challenges life exposes them to. At the core, creativity is closely connected with curiosity and is represented by an innate ability to investigate life, taking in information via our various senses and making sense, then deciding what to do with that information and creating responses and actions. Curiosity is a main ingredient that relates to cognition and creativity. Many researchers acknowledge that everyone is born with curiosity and that curi-

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- 25 Dewey, John. *How We Think*. Release Date: September 14, 2011 [EBook #37423]: D. C. HEATH & CO., PUBLISHERS BOSTON NEW YORK CHICAGO, 1910. <https://www.gutenberg.org/files/37423/37423-h/37423-h.htm>.
- 26 Lubart, Todd, and Branden Thornhill-Miller. »Creativity: An Overview of the 7 C's of Creative Thought.« *The Psychology of Human Thought*, 2019. <https://doi.org/10.17885/HEIUP.470.C6678>.
- 27 Lubart, Todd, and Branden Thornhill-Miller. »Creativity: An Overview of the 7 C's of Creative Thought.« *The Psychology of Human Thought*, 2019. <https://doi.org/10.17885/HEIUP.470.C6678>.

osity comes before creativity and lays the foundation for creative thought.²⁸ Every child displays curiosity until the human development reaches the age of early teens when curiosity gets pushed aside and becomes knowledge that one is considered to have and display in order to fit in and be successful. During teenage years, curiosity is being diminished and there is less time to explore and practice it. By the time a person gets to college, the focus lies on passing a test or finishing a project and they have forgotten that there is a whole world that offers interesting things to explore. During an interview for the film ‘YesNoMaybe’, a documentary that follows graduate students during a semester-long creativity training, advertising and branding professor Sheehan of the University of Oregon spoke about curiosity and her students:²⁹

»They have forgotten how to be curious. They feel they don’t have the time for that or those things aren’t important. To me, if we can find ways to rekindle this curiosity, that will lead to much more creativity in students and in anyone just because they’re opened up to brand new experiences and brand-new things and can start to make these very interesting connections.«

Creativity was recognized by Freud, who saw it as a source in humans that stems from a tension between conscious reality and unconscious drives.³⁰ Runco considers creativity as an important aspect to live our lives the way we want to.³¹ He connects creative thinking with gaining a better understanding of ourselves and being able to be aware and apply conscious thinking when making decisions and solving problems and identifies three facets of individual creative activity: interpretation, discretion, and intentionality. These three aspects impact both, the individual creative development and a possible

28 Kidd, Celeste, and Benjamin Y. Hayden. »The Psychology and Neuroscience of Curiosity.« *Neuron* 88, no. 3 (November 2015): 449–460. <https://doi.org/10.1016/j.neuron.2015.09.010>.

29 Vogel, Thomas and Padhaye, Jasraj. *YesNoMaybe*, Documentary Film, 2018.

30 Sternberg, Robert J., Lubart TI. *The Concept of Creativity: Prospects and Paradigms*. In: Sternberg RJ, ed. *Handbook of Creativity*. Cambridge University Press; 1998: 3-15.

31 Runco, Mark A. *Creativity: Theories and Themes: Research, Development, and Practice*. Amsterdam; Boston: Elsevier Academic Press, 2007.

development toward self-actualization.³² Richards states that creativity is an ability that humans possess, express and practice in everyday life and that can be considered a »universal quality« that helps human survival.³³ According to Csikszentmihalyi »a creative person is someone whose thoughts or actions change a domain, or establish a new domain« and that domain knowledge must be involved to understand the field.³⁴ Humans express their creativity based on personality traits as well as cognitive abilities, and many external circumstances and environmental factors such as upbringing, education, and domain knowledge can influence individual creativity.³⁵ According to Simonton, creativity represents a way through which »human beings can display optimal functioning.«³⁶

Researching creativity has always been closely related to looking at the person who is responsible for the creations and the creative product. Psychologists investigated the creative individuals and identified so-called creative traits. Feist identified a »functional model of the creative personality« in which he outlines the interconnection between brain characteristics and cognitive, social, motivational and clinical traits that combined lead to creative thought and behavior.³⁷ Openness to new experiences, being able to deal with ambiguity and greater willingness to take risks are just a few personality characteristics that are influential to creative behavior. Plucker and Renzulli point out that creativity related personality

32 Richards, Ruth. *Everyday Creativity and New Views of Human Nature: Psychological, Social, and Spiritual Perspectives*. American Psychological Association (APA). Kindle Edition.

33 Richards, Ruth. 2010. »Everyday Creativity: Process and Way of Life – Four Key Issues.« In *The Cambridge Handbook of Creativity*, edited by James C. Kaufman and Robert J. Sternberg, 1st ed., 189–215. Cambridge University Press. <https://doi.org/10.1017/CBO9780511763205.013>.

34 Csikszentmihalyi, Mihaly. *Creativity: Flow and the Psychology of Discovery and Invention*. 1st ed. New York: HarperCollinsPublishers, 1996. (Page 28).

35 Simonton, Dean Keith. 2000. »Creativity: Cognitive, Personal, Developmental, and Social Aspects.« *American Psychologist* 55 (1): 151–158. <https://doi.org/10.1037/0003-066X.55.1.151>.

36 Simonton, Dean Keith. 2000. »Creativity: Cognitive, Personal, Developmental, and Social Aspects.« *American Psychologist* 55 (1): 151–158. <https://doi.org/10.1037/0003-066X.55.1.151>.

37 Feist, Gregory J. In Search of the Creative Personality. In: Sternberg RJ, Kaufman JC, eds. *The Nature of Human Creativity*. Cambridge University Press; 2018: 63-76.

characteristics also include aesthetic taste, imagination, drive for accomplishment and intuition, which are different from general intelligence and wisdom.³⁸

Although much research has focused on identifying personality traits of highly creative individuals, several researchers point out that creativity is complex and propose a systems approach to investigating personal creativity. Gruber and Wallace point out three distinct areas that make a creative person: »The creative person is unique, developmental change is multidirectional, and the creative person is an evolving system.«³⁹ Other researchers support a more open systems perspective when looking at the creative person and incorporating how the environment and other external factors influence the creative behavior of humans. Richards cites Barron who describes the creative person as being multi-faceted that cannot be put into a specific box or labeled by specific traits,⁴⁰ as Barron stated that »the creative person is both more primitive and more cultivated, more destructive and more constructive, occasionally crazier and yet adamantly saner, than the average person.«⁴¹ As much person related creativity research has focused on the arts world and that of high-performance creatives, Richards suggests that offering a broader approach to creativity for everyone and everyday might hold many benefits. Richards points out that »older people who think more divergently and innovatively and remain interested, open and curious, tend to be more comfortable with aging, illness, and death.«⁴²

38 Plucker, Jonathan A., and Joseph S. Renzulli. »Psychometric Approaches to the Study of Human Creativity.« In *Handbook of Creativity*, 35–61. New York, NY, US: Cambridge University Press, 1999.

39 Gruber, Howard E., Wallace DB. The Case Study Method and Evolving Systems Approach for Understanding Unique Creative People at Work. In: Sternberg RJ, ed. *Handbook of Creativity*. Cambridge University Press; 1998: 93-115.

40 Richards, Ruth. *Everyday Creativity and New Views of Human Nature: Psychological, Social, and Spiritual Perspectives*. American Psychological Association (APA). Kindle Edition (p. 234).

41 Barron, Frank. *Creativity And Psychological Health: Origins Of Personal Vitality And Creative Freedom*. D. Van Nostrand, 1963. <https://archive.org/details/creativitypsycho0000fran/page/n7/mode/2up>.

42 Richards, Ruth. *Everyday Creativity and New Views of Human Nature: Psychological, Social, and Spiritual Perspectives*. American Psychological Association (APA). Kindle Edition.

Research shows that lack of self-confidence is one of the main obstacles why people don't consider themselves creative.⁴³ Kelley describes creative confidence as »a way of experiencing the world that generates new approaches and solutions.«⁴⁴ Research has demonstrated that when primed to believe that one is creative can greatly increase the actual creativity individuals apply during creativity and creative thinking tests.⁴⁵ Creative confidence can also be increased through specific creativity training, such as a semester-long college-based course in creative thinking and problems-solving.⁴⁶ Other researchers have identified similar findings related to the self-assessment of »I am not creative« and relate the lack of self-esteem and self-efficacy related to creativity and creative skills to experiencing judgement and evaluation during educational experiences when teachers might have associated a person's school assignment as not creative.⁴⁷ Lack of self-confidence and low self-efficacy impact how people pursue their daily lives and to which degree they are taking risks and creative approaches when dealing with challenges. According to Ockuly and Kelley & Kelley, building creative confidence and self-efficacy can

43 Kelley, David. »How to Build Your Creative Confidence.« TED Talk – Ideas Changing Everything, March 2023. https://www.ted.com/talks/david_kelley_how_to_build_your_creative_confidence?subtitle=en.

44 Kelley, Tom, and David Kelley. *Creative Confidence: Unleashing the Creative Potential within Us All*. London: William Collins, 2013.

45 Zhou, Zhijin, Lixia Hu, Cuicui Sun, Mingzhu Li, Fang Guo, and Qingbai Zhao. »The Effect of Zhongyong Thinking on Remote Association Thinking: An EEG Study.« *Frontiers in Psychology* 10 (February 7, 2019): 207. <https://doi.org/10.3389/fpsyg.2019.00207>.

46 Habib, Sabrina, Thomas Vogel and Evelyn Thorne. »Transformational Creative Pedagogy in the Age of AI: A Multiyear Qualitative Analysis Across Universities.« Presentation at The South Oregon University 2024 Annual Creativity Conference, Ashland, OR, May 2024.

47 Ockuly, Marta, 2019/06/18, *Reimagining the Way the Lived Experience of Creativity Is Defined, Inspired, And Encouraged In The 21 St Century: A Creativity Practitioner/ Educator's Heuristic*, Dissertation. 2019. https://www.researchgate.net/publication/334286254_REIMAGINING_THE_WAY_THE_LIVED_EXPERIENCE_OF_CREATIVITY_IS_DEFINED_INSPiRED_AND_ENCOURAGED_IN_THE_21_ST_CENTURY_A_CREATIVITY_PRACTITIONEREDUCATOR'S_HEURISTIC_INQUIRY#fullTextFileContent.

be achieved during creativity trainings⁴⁸ and has impact on how creative people consider themselves.⁴⁹

EVERYDAY CREATIVITY

Based on the assumption that creativity is part of our constant human development, transformation and journey through life, Richards points out that creativity is not so much focused on any specific activity but should be considered »a way of approaching life which can expand our experiences and options, and even deeply affect who we are – and can become.«⁵⁰ Richards identifies two key components of everyday creativity: originality and meaningfulness being interspersed with the element of newness, such as being surprised by unexpected situations and mishaps we might be confronted with on a daily basis. Richards mentions that one's own personal experience has greater influence on everyday creativity in comparison to new creative productions that happen in specific domains on a global scale, and argues that our everyday creativity has much to do with improvising and trying different options when dealing with our daily chores and human activities. According to Richards, the creative product can manifest itself by newly found insights, learnings, changing attitudes and behaviors and that everyday creativity is often »underrecognized, underdeveloped, and under rewarded, in schools, at work, and at home.«⁵¹

48 Kelley, Tom, Kelley, David (2014). *Creative Confidence: unleashing the creative potential within us all*. London: William Collins.

49 Ockuly, Marta. »Reimagining the Way the Lived Experience of Creativity Is Defined, Inspired, And Encouraged In The 21 St Century: A CREATIVITY PRACTITIONER/EDUCATOR'S HEURISTIC INQUIRY,« 2019.

50 Richards, Ruth. *Everyday Creativity and New Views of Human Nature: Psychological, Social, and Spiritual Perspectives*. American Psychological Association (APA). Kindle Edition.

51 Richards, Ruth. Chapter 1 - »Everyday Creativity: Our Hidden Potential.« In *Everyday Creativity and New Views of Human Nature: Psychological, Social, and Spiritual Perspectives*, 25–53. Washington, DC, US: American Psychological Association, 2007. <https://doi.org/10.1037/11595-001>.

Beghetto and Kaufman acknowledge that everyday creativity can happen everywhere and that anyone can experience so-called little-c creativity moments where creativity happens in small and mundane situations. They also recognize the concept of Big-C creativity that represents the creative acts and productions of well-known, established and highly accomplished creative individuals in any discipline. While both, little-c and Big-C represent rather opposite points of the spectrum of creative activities, Beghetto and Kaufman introduced two additional components that lie in-between and added the concept of »mini-c«, addressing the fact that creativity is part of everyone's learning process, and the concept of Pro-c, »the developmental and effortful progression beyond little-c that represents professional-level expertise in any creative area«. ⁵²

THE CREATIVE SELF AND SELF-EFFICACY

As curiosity is a personal characteristic that represents an innate ability to wonder about what is going on in ourselves as well as on the outside world, the ability to express ourselves creatively has existed since the beginning of mankind. Engaging in creative activities, applying creativity and accomplishing creative productions leads to increased confidence and results in creative self-efficacy (CSE).⁵³ Creative self-efficacy represents the perceived confidence one feels when performing creative tasks.⁵⁴ Creative self-efficacy is grounded in the belief that one can be creative and that creativity and the self co-exist in a relationship. We believe that we can produce something creative and the creative production and accomplishments confirms and strengthens the belief in our own creative abilities. Creativity trainings have shown to

52 Kaufman, James C., and Ronald A. Beghetto. »Beyond Big and Little: The Four C Model of Creativity.« *Review of General Psychology* 13, no. 1 (March 2009): 1–12. <https://doi.org/10.1037/a0013688>.

53 Beghetto, Ronald, and Maciej Karwowski. »Toward Untangling Creative Self-Beliefs.« In *The Creative Self: Effect of Beliefs, Self-Efficacy, Mindset, and Identity*. Edited by Karwowski, Maciej, and James C. Kaufman. Boston, MA: Elsevier, 2017.

54 Beghetto, Ronald, and Maciej Karwowski. »Toward Untangling Creative Self-Beliefs.« In *The Creative Self: Effect of Beliefs, Self-Efficacy, Mindset, and Identity*. Edited by Karwowski, Maciej, and James C. Kaufman. Boston, MA: Elsevier, 2017.

play a role in fostering and increasing confidence, creative self-efficacy and creative self-belief.⁵⁵

The belief that creativity plays an important role in one's life leads to creative personal identity (CPI). Creative self-efficacy combined with creative personal identity can be seen as the creative self, which is described »as a higher-order, self-concept factor composed of belief in one's creative capacities (CSE) and importance of creativity for self-identity (CPI).«⁵⁶ According to Glăveanu, creative personal identity is also influenced by social interactions and the opinion of others as the creative individual and their creative products and contributions are reviewed within a social context and through interactions with people in various personal and professional. Glăveanu considers creative personal identity as a function of societal discourse and on how much the individual values creativity in their life.⁵⁷

METACOGNITION

Metacognition is a cognitive skill that allows individuals to think about their own thinking and regulate their individual thought processes and cognitive resources. Metacognition represents a level of understanding and knowing oneself and entails the ability to think about oneself and becoming reflective of one's actions.⁵⁸ According to Flavell, metacognition

55 Mathisen, Gro Ellen, and Kolbjorn S. Bronnick. »Creative Self-Efficacy: An Intervention Study.« *International Journal of Educational Research* 48, no. 1 (January 2009): 21–29. <https://doi.org/10.1016/j.ijer.2009.02.009>.

56 Karwowski, Maciej. »Did Curiosity Kill the Cat? Relationship Between Trait Curiosity, Creative Self-Efficacy and Creative Personal Identity.« *Europe's Journal of Psychology* 8, no. 4 (September 27, 2012): 547–558. <https://doi.org/10.5964/ejop.v8i4.513>.

57 Glăveanu, Vlad Petre, and Lene Tanggaard. »Creativity, Identity, and Representation: Towards a Socio-Cultural Theory of Creative Identity.« *New Ideas in Psychology* 34 (August 2014): 12–21. <https://doi.org/10.1016/j.newideapsych.2014.02.002>.

58 Sternberg, Robert J. ed. *Handbook of Creativity*. Cambridge University Press, 1999 Cambridge, U.K.; New York. Kindle Edition..

»plays an important role in oral communication of information, oral persuasion, oral comprehension, reading comprehension, writing, language acquisition, attention, memory, problem solving, social cognition, and, various types of self-control and self-instruction«⁵⁹

Metacognition has been associated with creativity, creative thinking and the creative process as metacognition enables a person to be aware of the various phases they operate in when working on creative challenges and problems and knowing and deciding when to use diverging thinking and converging thinking.⁶⁰ Creative metacognition allows a person to be aware of their creative abilities, draw from their inner knowledge making strategic decisions on how to interact with the world creatively.⁶¹ Hargrove and Nietfeld revealed that metacognition can be learned and applied during creativity training and that metacognitive awareness helps with creative tasks and leads to achieving higher scores in divergent thinking tests, particularly when measuring fluency and originality.⁶²

THE CREATIVE PROCESS

Creativity is grounded in thinking and appears when both, the conscious and the subconscious mind are at work. Creativity and creative thinking involve several stages from ideation and »thinking up« something or thinking of something and acknowledging an idea and then further developing that idea before putting ideas to work and producing creative result, productions,

59 Flavell, John H. (1979). Metacognition and cognitive monitoring: A new area of cognitive–developmental inquiry. *American Psychologist*, 34 (10), 906–911. <https://doi.org/10.1037/0003-066X.34.10.906>.

60 Lebuda, Izabela, & Benedek, M. (2023). A systematic framework of creative metacognition. *Physics of Life Reviews* 46, 161–181. <https://doi.org/10.1016/j.plev.2023.07.002>.

61 The Creative Self: Effect of Beliefs, Self-Efficacy, Mindset, and Identity (Explorations in Creativity Research) by Maciej Karwowski, James C. Kaufman. <https://a.co/5C0zu8l>.

62 Hargrove, Ryan A., & Nietfeld, J. L. (2015). The Impact of Metacognitive Instruction on Creative Problem Solving. *The Journal of Experimental Education*, 83 (3), 291–318. <https://doi.org/10.1080/00220973.2013.876604>.

products and artifacts. Lubart & Thornhill-Miller describe the creative process as »the sequence of thoughts and actions that characterizes the generative act, resulting in an original, valuable production.«⁶³

Creativity researchers have not only been interested in investigating how the individual creative person is creative, but also in studying cognitive tasks and processes that are at play when creative thinking is at work. Much of our thinking happens at the unconscious level as our evolutionary brain has learned over millions of years how to make crucial decisions fast.⁶⁴ From early childhood onwards we learn to develop schemas, learn certain scripts and concepts that allow us to quickly and easily understand the basics of how to function in life, and process complex information when decision making is required.⁶⁵ While our brain operates very efficiently and quickly, it makes assumptions when we make decisions.

Conscious thinking and metacognition help us become aware and identify potential assumptions that might influence our thinking and decision-making process. Metacognition refers to being aware of our own thinking and thoughts.⁶⁶ Creativity researchers identified various stages and phases during those specific cognition is at work.⁶⁷ The different phases within all creative processes involve divergent and convergent thinking and are at work like ebb and flow. During the divergent phase one tries to come up with as many different and original ideas as possibly by pushing our imagination and thinking in different and unexpected directions⁶⁸ before converging and finding the best idea to fit a challenge or serve as a solution. Convergent

63 Lubart, Todd, and Branden Thornhill-Miller. »Creativity: An Overview of the 7C's of Creative Thought.« *The Psychology of Human Thought*, 2019. <https://doi.org/10.17885/HEIUP.470.C6678>.

64 Bartlett, Frederic C. (1932). *Remembering: A study in experimental and social psychology*. (pp. xix, 317). Cambridge University Press.

65 Piaget, Jean (2003). *The Psychology of Intelligence* (0 ed.). Routledge. <https://doi.org/10.4324/9780203164730>.

66 Livingston, Jennifer A. (2003). *Metacognition: An Overview*. State University of Buffalo, New York; U.S. Department of Education. <https://files.eric.ed.gov/fulltext/ED474273.pdf>.

67 Runco, Mark A. *CREATIVITY: THEORIES AND THEMES: RESEARCH, DEVELOPMENT, AND PRACTICE*. SECOND EDITION. AMSTERDAM: ELSEVIER, 2014.

68 Torrance, Ellis Paul. »TORRANCE® TESTS OF CREATIVE THINKING - INTERPRETIVE MANUAL.« Scholastic Testing Service, Inc., 480 Meyer Road, Bensenville, Illinois 60106-1617, 2018. https://www.ststesting.com/gift/TTCT_InterpMOD.2018.pdf.

thinking involves the evaluation of ideas, concepts and circumstances, narrowing down few or one solution and applying what can be described as critical thinking.⁶⁹

Weisberg provides an overview of several creative processes by Poincare, Wallas, Hadamard, Koestler, Simonton and Csikszentmihalyi, and points out that each researcher identifies a specific mechanism that describes how unconscious and conscious thinking are at work.⁷⁰ Guilford, Wallas, Amabile, Young, Mednick and Osborn & Parnes developed additional models describing the creative process⁷¹ and identifying various steps that include various forms of problem definition, research and investigation, idea generation, evaluation and decision-making.⁷² Habib discovered that the creative process is being influenced by technology, particularly during the research phase as well as the brainstorming phase.⁷³ While many different models describing the creative process exist, there is no singular creative process that can exclusively describe how the interaction between the conscious and the unconscious thinking takes place.

SOCIO-EMOTIONAL CREATIVITY

People experience a wide range of emotions during different life situations. When a person engages in creative activities, they can experience distinct feelings and moods, and depending on the circumstances, these emotions might

69 Glăveanu, Vlad P., and James C. Kaufman. »Creativity: A Historical Perspective.« In *The Cambridge Handbook of Creativity*, edited by James C. Kaufman and Robert J. Sternberg, 2nd ed., 9–26. Cambridge University Press, 2019. <https://doi.org/10.1017/9781316979839.003>.

70 Weisberg, Robert W. *Creativity: Understanding Innovation in Problem Solving, Science Innovation and the Arts*. Hoboken, New Jersey: J. Wiley, 2006.

71 Vogel, Thomas. *Breakthrough Thinking: A Guide to Creative Thinking and Idea Generation*. 1st ed. Cincinnati, Ohio: How Books, 2014.

72 Isaksen, Scott G., K. Brian Dorval, and Donald J. Treffinger. *Creative Approaches to Problem Solving*. 3rd test ed. Dubuque, Iowa: Kendall/Hunt, 1994.

73 Habib, Sabrina (2015). Teaching Approaches in Advertising: Creativity and Technology. *Journal of Advertising Education*, 19 (1), 17–25. <https://doi.org/10.1177/109804821501900104>.

be positive, neutral, negative or mixed in nature. While creative activities are often associated with feeling positive and being in a good mood, different emotions can stimulate different kinds and levels of creative productions.⁷⁴ Being aware of one's emotions has been associated with emotional intelligence. Salovey and Mayer describe emotional intelligence as »the ability to monitor one's own and others' feelings and emotions, to discriminate among them, and to use this information to guide one's thinking and actions.«⁷⁵

Averill explored the relationship between emotions and creativity and developed the Emotional Creativity Inventory (ECI) that describes three aspects of emotional creativity that can be described as »preparedness – understanding and learning from one's own and others' emotions, novelty – the ability to experience unusual emotions, and effectiveness/authenticity – the skill to express emotions adroitly and honestly.«⁷⁶ According to Kuška et al., »Emotional creativity (EC) is a pattern of cognitive abilities and personality traits related to originality and appropriateness in emotional experience.«⁷⁷ Naa Anyimah Botchway describes emotional creativity as »the ability to create something new through the influence of emotions evoked from the personal or experiences of others.«⁷⁸

Emotional intelligence, empathy, self-awareness and emotional creativity are socio-emotional and creativity-related soft skills that are becoming increasingly important for individuals to possess to ensure the development and sustainability of healthy societies.⁷⁹ Soft skills such as motivation, self-aware-

74 Botchway, Cynthia Naa Anyimah. 2022. »Emotional Creativity.« In *Creativity*, edited by Silvio Manuel Brito and João P. C. Fernandes Thomaz. IntechOpen. <https://doi.org/10.5772/intechopen.104544>.

75 Salovey, Peter, and John D. Mayer. 1990. »Emotional Intelligence.« *Imagination, Cognition and Personality* 9 (3): 185–211. <https://doi.org/10.2190/DUGG-P24E-52WK-6CDG>.

76 Averill, James R. 1999. »Individual Differences in Emotional Creativity: Structure and Correlates.« *Journal of Personality* 67 (2): 331–371. <https://doi.org/10.1111/1467-6494.00058>.

77 Kuška, Martin, Radek Trnka, Josef Mana, and Tomas Nikolai. 2020. »Emotional Creativity: A Meta-Analysis and Integrative Review.« *Creativity Research Journal* 32 (2): 151–160. <https://doi.org/10.1080/10400419.2020.1751541>.

78 Botchway, Cynthia Naa Anyimah. 2022. »Emotional Creativity.« In *Creativity*, edited by Silvio Manuel Brito and João P. C. Fernandes Thomaz. IntechOpen. <https://doi.org/10.5772/intechopen.104544>.

79 OECD. 2023. *OECD Skills Outlook 2023: Skills for a Resilient Green and Digital Transition*. OECD Skills Outlook. OECD Publishing. <https://doi.org/10.1787/27452f29-en>.

ness, empathy and active listening are associated with socio-emotional learning and can be developed in children and adults. The need for developing soft skills such as critical thinking, creativity and emotional management has been identified by researchers and educators, and teachers are increasingly asked to foster those skills in educational settings.⁸⁰

Social-emotional development is associated with learning and teaching and impacts the well-being of children, adolescents and adults, as well as how they interact with the world not only in educational settings but outside the classroom.⁸¹ Social-emotional skills provide a foundation for learning and for being an actively engaged member of any community and society at large. Sklad et al. conducted a meta-analysis and found that social and emotional learning (SEL) programs have positive outcomes and

»include enhancement of social and emotional skills; positive self-image; prosocial behavior; reduction or prevention of antisocial behavior, mental problems, and disorders; and promotion of academic achievement.«⁸²

In order to mediate for children's overall well-being, programs such as »the Emotional Literacy Program (ELP) and the Creative Thinking Development Program (Flow)« have been developed to train teachers in their abilities to foster socio-emotional skills in children.⁸³ According to the Collaborative

80 Cristóvão, Ana M., Adelinda A. Candeias, and José Lopes Verdasca. 2020. »Development of Socio-Emotional and Creative Skills in Primary Education: Teachers' Perceptions About the Gulbenkian XXI School Learning Communities Project.« *Frontiers in Education* 4 (January): 160. <https://doi.org/10.3389/feduc.2019.00160>.

81 Lee, Carol D., and Alessandra Ward. (2024). »The Role of SEL in Improving Literacy Development.« Collaborative for Academic, Social, and Emotional Learning (CASEL). Accessed October 14, 2024. <https://casel.org/role-of-sel-in-improving-literacy-development-introductory-brief/>.

82 Sklad, Marcin, René Diekstra, Monique De Ritter, Jehonathan Ben, and Carolien Gravestijn. 2012. »Effectiveness of School-based Universal Social, Emotional, and Behavioral Programs: Do They Enhance Students' Development in the Area of Skill, Behavior, and Adjustment?« *Psychology in the Schools* 49 (9): 892–909. <https://doi.org/10.1002/pits.21641>.

83 Cristóvão, Ana M., Adelinda A. Candeias, and José Lopes Verdasca. 2020. »Development of Socio-Emotional and Creative Skills in Primary Education: Teachers' Perceptions About the Gulbenkian XXI School Learning Communities Project.« *Frontiers in Education* 4 (January):160. <https://doi.org/10.3389/feduc.2019.00160>.

for Academic Social and Emotional Learning (CASEL), social and emotional skills are »cognitive, affective and behavioral in nature«,⁸⁴ and Social and Emotional Learning (SEL) programs

»should develop five main domains: (1) Self-awareness skills refer to the ability to understand one's own emotions, personal goals, and values. This includes accurately assessing one's strengths and limitations and possessing a well-grounded sense of confidence and optimism. (2) Self-management skills deal with the ability to regulate one's emotions and behaviors. This includes managing stress, controlling impulses, and setting and working toward achieving personal and academic goals. (3) Social awareness skills pertain to the ability to see things from the perspective of people from different cultures and backgrounds. (4) Relationship skills are those tools that children need to establish and maintain healthy and rewarding relationships; and, (5) Skills in responsible decision-making concern the ability to consider ethical standards, safety concerns, and accurate behavioral norms for risky behaviors, so as to be realistically able to evaluate the consequences of various actions, and to take the health and well-being of oneself and others into consideration.«⁸⁵

Garaigordobil et al. confirmed that children's creative and socio-emotional competencies can be developed through the engagement in playful activities and games, and found that various positive social behaviors had been increased.⁸⁶ The authors identified a

84 Collaborative for Academic, Social, and Emotional Learning (CASEL). 2003. *Safe and Sound: An Educational Leader's Guide to Evidence-Based Social and Emotional Learning (SEL) Programs*. Chicago, IL.

85 Cristóvão, Ana M., Adelinda A. Candeias, and José Lopes Verdasca. 2020. »Development of Socio-Emotional and Creative Skills in Primary Education: Teachers' Perceptions About the Gulbenkian XXI School Learning Communities Project.« *Frontiers in Education* 4 (January):160. <https://doi.org/10.3389/educ.2019.00160>.

86 Garaigordobil, Maite, Laura Berruero, and Macarena-Paz Celume. 2022. *Developing Children's Creativity and Social-Emotional Competencies through Play: Summary of Twenty Years of Findings of the Evidence-Based Interventions »Game Program«*. *Journal of Intelligence* 10: 77. <https://doi.org/10.3390/jintelligence10040077>.

»significant impact: (1) in social development, by increasing various positive social behaviors and decreasing many negative social behaviors; by increasing assertive cognitive strategies and prosocial resolution of interpersonal problems; and by enhancing relationships and positive communication among group members; (2) in emotional development, by improving self-concept, peer image, and emotional stability; and (3) in cognitive development, by increasing verbal intelligence, verbal and graphic-figurative creativity, as well as creative personality behaviors and traits.«⁸⁷

CREATIVITY AND SYSTEMS

Adding a system's approach, several creativity researchers acknowledge that creativity does not only rely on a person's individual skills and abilities but also is comprised and influenced by additional external factors such as collaborators, critics, environment, culture and society. Kaufman considers creativity as »a system that involves people, objects, institutions, and has its own specific temporal dynamic.«⁸⁸ While Csikszentmihalyi defines creativity as »any act, idea, or product that changes an existing domain, or that transforms an existing domain into a new one« and accordingly, defines a creative person as »someone whose thoughts or actions change a domain, establish a new domain« he points out that there is more to creativity than the person practicing and creating it.⁸⁹ Creativity not only requires the creative person but is also impacted by the domain knowledge a person possesses and the expertise one has developed for a specific field. Experts within

87 Garaigordobil, Maite, Laura Berruero, and Macarena-Paz Celume. 2022. Developing Children's Creativity and Social-Emotional Competencies through Play: Summary of Twenty Years of Findings of the Evidence-Based Interventions »Game Program«. *Journal of Intelligence* 10: 77. <https://doi.org/10.3390/jintelligence10040077>.

88 Kaufman, James C., and Robert J. Sternberg, eds. *The Cambridge Handbook of Creativity*. 2nd ed. Cambridge University Press, 2019. <https://doi.org/10.1017/9781316979839>.

89 Csikszentmihalyi, Mihaly. 1996. *Creativity: Flow and the Psychology of Discovery and Invention*. 1st ed. New York: Harper Collins Publishers.

a specific field can act as gatekeepers and influence what is considered creative or not.⁹⁰

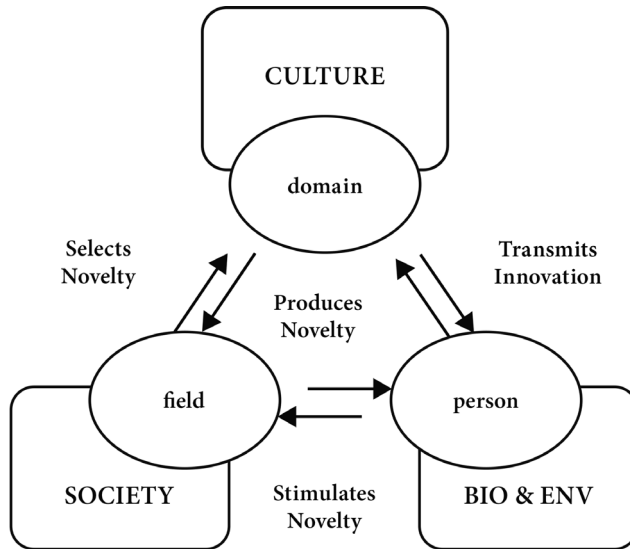


Figure 2-1. The Systems Model of Creativity by Csikszentmihalyi (McIntyre 2008⁹¹, first published by Csikszentmihalyi 1999: 315).

The perspective that creativity is influenced by many individual factors and exists as a system in which various aspects such as the creator, the audience, collaborators and society at large are part of an interconnected network, similarly to a social network, is also shared by Ogle.⁹² According to Ogle, creativity never happens in a vacuum but is always influenced by those we interact with and whose ideas might influence our thinking and actions.

Another system approach to creativity is provided by Lubart as he proposes the framework of the 7 Cs, in which he describes creativity from seven

90 Csikszentmihalyi, Mihaly. 1996. *Creativity: Flow and the Psychology of Discovery and Invention*. 1st ed. New York: Harper Collins Publishers.

91 McIntyre, Phillip (2008). *The Systems Model of Creativity: Analyzing The Distribution Of Power In The Studio*, *Journal on the Art of Record Production*, ISSN: 1754-9892.

92 Ogle, Richard. 2007. *Smart World: Breakthrough Creativity and the New Science of Ideas*. Boston, Mass: Harvard Business School Press.

different perspectives: Creators (person-centered characteristics), Creating (the creative process), Collaborations (co-creating), Contexts (environmental conditions), Creations (the nature of creative work), Consumption (the adoption of creative products) and Curricula (the development and enhancement of creativity).⁹³ Lubart and Thornhill-Miller reflect on Lubart's 7 Cs of creativity framework and consider creativity »a fundamental aspect of human thinking, that can be understood through a »7 C's« approach.⁹⁴ According to Lubart and Thornhill-Miller, the 7 Cs of creativity represent an analogy similar to the »Seven Seas« that have historically described the major bodies of water on Earth, and represent the major components that influence creativity from a holistic perspective.⁹⁵ Within the 7 Cs framework, the person is the sole creator and is applying creative and divergent as well as convergent thinking to create some novelty in any field. Lubart and Thornhill-Miller define individuals »who engage in creative thinking« as creative and acknowledge that every person is capable of being more or less 'creative' and engaging in creative production.⁹⁶ Without distinguishing various forms of creativity and creative productivity, a creator can be innovative in professional as well as everyday life situations. While recognizing that creativity relates to and depends on individual cognitive skills and is related to personality traits, Lubart and Thornhill-Miller acknowledge that, according to a humanistic tradition »each person designs his or her life path and sculpts who he or she is, as an ongoing, lifelong creative work.«⁹⁷ The authors identify two main components related to the creator: »abilities and traits«. Creativity-related abilities are associated with cognitive skills responsible for processing information and using information to change perspectives and develop original thoughts. Lubart and Thornhill-Miller list the following cognitive characteristics: »Divergent

93 Lubart, Todd. »The 7 C's of Creativity.« *The Journal of Creative Behavior* 51, no. 4 (December 2017): 293–296. <https://doi.org/10.1002/jocb.190>.

94 Lubart, Todd, & Thornhill-Miller, B. (2019). Creativity: An Overview of the 7 C's of Creative Thought. *The Psychology of Human Thought*. <https://doi.org/10.17885/HEIUP.470.C6678>.

95 Lubart, Todd (2017). The 7 C's of Creativity. *The Journal of Creative Behavior*, 51 (4), 293–296. <https://doi.org/10.1002/jocb.190>.

96 Lubart, Todd, & Thornhill-Miller, B. (2019). Creativity: An Overview of the 7C's of Creative Thought. *The Psychology of Human Thought*. <https://doi.org/10.17885/HEIUP.470.C6678>.

97 Lubart, Todd, & Thornhill-Miller, B. (2019). Creativity: An Overview of the 7C's of Creative Thought. *The Psychology of Human Thought*. <https://doi.org/10.17885/HEIUP.470.C6678>.

thinking, convergent thinking, mental flexibility, analogical and metaphorical thinking, associative thinking, analytic-evaluative thinking, knowledge« and »conative ingredients: openness to experience, idiosyncrasy, risk taking, tolerance of ambiguity, creative self-concept and Intrinsic motivation.«⁹⁸

Creativity-relevant traits describe creative behavior that is associated with personality, thinking styles and motivational aspects such as intrinsic and extrinsic motivation that support original thinking.⁹⁹ The creative process represents the second C in the 7 C framework and »refers to the sequence of thoughts and actions that characterizes the generative act, resulting in an original, valuable production« as well as various »stages, steps or sub-processes«. The third C stands for collaboration and represents co-creation which

»refers to the process through which two or more people, often with different or complementary skills, engage in shared creation, frequently producing something that they could not or would not produce on their own.«¹⁰⁰

While highly creative and accomplished individuals work on groundbreaking inventions and products, the majority of creations is being generated by teams and collaborators.¹⁰¹ As technology has allowed humans to connect with each other beyond the physical room they might share, collaboration across many industries and disciplines has increased over the last several decades. New services and companies have started offering crowd sourced services providing access to numerous talents that can work on challenges and special assignments and increasing the probabilities of generating unique, new, original and useful results. As creators are influenced by their environ-

98 Lubart, Todd, & Thornhill-Miller, B. (2019). Creativity: An Overview of the 7C's of Creative Thought. *The Psychology of Human Thought*. <https://doi.org/10.17885/HEIUP.470.C6678>.

99 Lubart, Todd, & Thornhill-Miller, B. (2019). Creativity: An Overview of the 7C's of Creative Thought. *The Psychology of Human Thought*. <https://doi.org/10.17885/HEIUP.470.C6678>.

100 Lubart, Todd, & Thornhill-Miller, B. (2019). Creativity: An Overview of the 7C's of Creative Thought. *The Psychology of Human Thought*. <https://doi.org/10.17885/HEIUP.470.C6678>.

101 Wuchty, Stefan, Benjamin F. Jones, and Brian Uzzi. »The Increasing Dominance of Teams in Production of Knowledge.« *Science* 316, no. 5827 (May 18, 2007): 1036–1039. <https://doi.org/10.1126/science.1136099>.

ments, as well as by the people they interact with and who consciously or subconsciously affect the creator, all creativity always has been and will be affected in a collaborative way.¹⁰² Therefore, creativity should be practiced and understood not only from the perspective of the individual creator but of where creativity takes place and might be influenced by external societal and cultural factors. The authors draw a connection to Csikszentmihalyi, who proposed a »systems model« and suggested

»that »creativity« – whatever one decides it is – is found in the triangular inter-relationship between the individual talent, the parameters of the particular creative domain in which a person works, and the field of experts that help define and identify the other two components.«¹⁰³

The fourth C in the 7 Cs framework is described as the component »Contexts: Environmental Conditions« and assumes that creativity does not happen in a vacuum but is influenced by »physical and social spheres« and »it can be described as a multilayered environment in which a person's local family, school, and work contexts are nested in their larger geographical, regional, national, and international contexts«.¹⁰⁴ Many companies have incorporated special rooms and architectural designs that foster the, often unplanned, meeting and interaction among employees in corporate environments. Particularly, companies in advertising, marketing and other related creative industries are incorporating how the physical and psychological environments can improve and encourage employee's creativity and how employees are encouraged to bump into each other and start conversations.¹⁰⁵ Contexts also

102 Lubart, Todd, & Thornhill-Miller, B. (2019). Creativity: An Overview of the 7C's of Creative Thought. *The Psychology of Human Thought*. <https://doi.org/10.17885/HEIUP.470.C6678>.

103 Lubart, Todd, & Thornhill-Miller, B. (2019). Creativity: An Overview of the 7C's of Creative Thought. *The Psychology of Human Thought*. <https://doi.org/10.17885/HEIUP.470.C6678>.

104 Lubart, Todd, and Branden Thornhill-Miller. »Creativity: An Overview of the 7C's of Creative Thought.« *The Psychology of Human Thought*, 2019. <https://doi.org/10.17885/HEIUP.470.C6678>.

105 Vogel, Thomas. *Breakthrough Thinking: A Guide to Creative Thinking and Idea Generation*. 1st ed. Cincinnati, Ohio: How Books, 2014.

include the fact that cultures can have an impact on creators and creations as certain cultures might foster and encourage creative endeavors and others might hinder it based on valuing creativity and creative productions as desirable or not. Lubart and Thornhill-Miller further attribute contexts and environmental conditions to a »sociocultural approach« where »creativity is embedded as a phenomenon in a cultural time and space«, a concept where creativity and culture are intertwined and influence each other and where creative thoughts are connected to and shaped by the cultural environment one lives in.¹⁰⁶

»Creations: The Nature of Creative Work« represent the fifth C in Lubart's 7 C framework. As the creator applies their individual creativity while applying a creative process that is influenced by environmental factors, the term creations relate to the emergence of something out of nothing and resulting in a product, artwork, oeuvre, service or else. It is considered the »outcome« resulting from thoughts and ideas and turning into tangible and intangible production also known as »creations«. According to Lubart and Thornhill-Miller, »The extent to which the resulting creation is deemed to be original and valuable, however, is what will determine the creativity of the work. Not all creations are original or valuable.«¹⁰⁷

Determining if a creation is considered creative or not requires evaluating the production according to specific evaluation criteria. Evaluation is often performed by experts within a field that have helped establish frameworks of how to assess works, productions and creations and determining what counts as original, unique new and innovation. While a creator can evaluate and assess their creative production, Lubart and Thornhill-Miller argue that »this

106 Lubart, Todd, and Branden Thornhill-Miller. »Creativity: An Overview of the 7C's of Creative Thought.« *The Psychology of Human Thought*, 2019. <https://doi.org/10.17885/HEIUP.470.C6678>.

107 Lubart, Todd, & Thornhill-Miller, B. (2019). *Creativity: An Overview of the 7C's of Creative Thought*. *The Psychology of Human Thought*. <https://doi.org/10.17885/HEIUP.470.C6678>.

evaluation is made socially: there is a peer or expert review of the production, which situates the work with respect to other existing work.«¹⁰⁸ Creative productions and the way they are being evaluated and deemed original or valuable, relates back to the evaluators, might they be a specific group, a culture or society at large. Depending on the culture, certain creative accomplishments might be favored within artistic fields versus those who might be preferred creative achievements in science and technology or other fields. In some cases, certain cultures might even encourage breaking with traditions and foster innovation and progress. In the end, the culture has a say in what is considered creative or not.¹⁰⁹

As creations and creative productions are influenced and, in some cases, accepted or resisted by cultural context, Lubart and Thornhill-Miller introduce a sixth C, Consumption: The Adoption of Creative Products. Consumption is closely connected to business, economy and market forces that influence the supply and demand of creative productions and services. As new products and services are being created, value is generated that is appreciated by individuals, groups or whole markets. Once new ideas are being appraised as valuable and those ideas are being executed, then value can be created in the form of an enhanced user experience, improvement of services or the creation of some groundbreaking innovation that did not exist before. Consumption of creative productions also happens at an individual consumer level when individuals are drawn to purchasing creative products as part of self-expression, being early adopters or possibly co-creators by utilizing creative products in new ways.

The last and seventh C in Lubart's 7 C framework is Curricula: Developing Creativity. Lubart and Thornhill-Miller explain that »the term »Curricula« focuses on the development, education, or enhancement of creativity« and can be applied at various educational levels, beginning in early childhood education, throughout K-12 education, as well as in continuing education

108 Lubart, Todd, & Thornhill-Miller, B. (2019). Creativity: An Overview of the 7C's of Creative Thought. *The Psychology of Human Thought*. <https://doi.org/10.17885/HEI-UP.470.C6678>.

109 Lubart, Todd, & Thornhill-Miller, B. (2019). Creativity: An Overview of the 7C's of Creative Thought. *The Psychology of Human Thought*. <https://doi.org/10.17885/HEI-UP.470.C6678>.

for adults.¹¹⁰ The authors identify two distinct areas of creativity development and training. The first area focuses on primary and secondary education and can be attributed to educational settings where creative thinking is being encouraged and promoted. Lubart and Thornhill-Miller point out that the two educators Maria Montessori and Celestin Freinet each created innovative pedagogical approaches allowing students to experience learning and acquiring knowledge through a hands-on style that such an active learning process can be considered as »a form of creativity training«.¹¹¹ Another example is Rudolf Steiner who created the Waldorf School model encouraging a holistic approach to education and student learning incorporating intellectual, practical and hands-on skills.

According to Lubart and Thornhill-Miller, the second area consists of

»training programs or activity modules which can foster creativity. These programs tend to focus either (a) on building up expertise about creativity and its mechanisms by learning about the nature of creativity and practicing creative thinking, or (b) learning specific techniques which are process-oriented skills or procedures that a person can implement to boost their creative thinking.«¹¹²

Specific creativity training programs are being used in professional settings as part of adult learning and skill development among employees that can enhance employees' thinking capabilities often associated with idea generation in improve corporate productivity and innovation readiness. Lubart and Thornhill-Miller identify three main categories of creativity skill development: brainstorming-like techniques, associative and analogic techniques,

110 Lubart, Todd, & Thornhill-Miller, B. (2019). Creativity: An Overview of the 7C's of Creative Thought. *The Psychology of Human Thought*. <https://doi.org/10.17885/HEI-UP.470.C6678>.

111 Lubart, Todd, & Thornhill-Miller, B. (2019). Creativity: An Overview of the 7C's of Creative Thought. *The Psychology of Human Thought*. <https://doi.org/10.17885/HEI-UP.470.C6678>.

112 Lubart, Todd, & Thornhill-Miller, B. (2019). Creativity: An Overview of the 7C's of Creative Thought. *The Psychology of Human Thought*. <https://doi.org/10.17885/HEI-UP.470.C6678>.

and perspective or frame-changing techniques.¹¹³ Further implications that are associated with the seventh C – Curricula: Developing Creativity, will be further explored in the section ‘Creativity and Education’ below.

SOCIOCULTURAL CREATIVITY

Sociocultural psychology assumes that although creativity happens at an individual level when the mind is engaged in creative thinking, »psyche and culture, person and context to be interdependent and do not to exist as two separate and simply interacting units.«¹¹⁴ Amabile developed a componential framework for describing individual creativity as a function of creativity-related skills, domain expertise and task motivation, and acknowledged that individual creativity is also influenced by social and environmental factors.¹¹⁵ According to Glăveanu, the Rhodes’ 4 P framework »supported an individualistic, static, and oftentimes disjointed vision of creativity.«¹¹⁶ Building on several emerging insights related to social and cognitive psychology and facets, as well as the complexity of creativity as a field, Glăveanu expands on Rhodes’ 4 P framework and proposed a Five A’s framework that is grounded in the field of sociocultural psychology and influenced by an ecological psychology. Humans interact with each other and with their respective environment and their individual thinking is always influenced by those interactions leading to new thoughts and insights. Humans therefore are part of a larger system and their creativity activities and creative productions should

113 Lubart, Todd, & Thornhill-Miller, B. (2019). Creativity: An Overview of the 7C’s of Creative Thought. *The Psychology of Human Thought*. <https://doi.org/10.17885/HEI-UP.470.C6678>.

114 Glăveanu, Vlad Petre. »Rewriting the Language of Creativity: The Five A’s Framework.« *Review of General Psychology* 17, no. 1 (March 2013): 69–81. <https://doi.org/10.1037/a0029528>.

115 Amabile, Teresa M. 1983. »The Social Psychology of Creativity: A Componential Conceptualization.« *Journal of Personality and Social Psychology* 45 (2): 357–76. <https://doi.org/10.1037/0022-3514.45.2.357>.

116 Glăveanu, Vlad Petre. »Rewriting the Language of Creativity: The Five A’s Framework.« *Review of General Psychology* 17, no. 1 (March 2013): 69–81. <https://doi.org/10.1037/a0029528>.

not be isolated exclusively within the container of the human self. According to Glăveanu »mental processes are gradually seen as not taking place exclusively »in the head« but being situated and distributed between brain and body, person and environment.«¹¹⁷ The five A's framework proposes to »rewriting our current language of creativity – from person to actor, from process to action, from product to artifact, from press to audiences and affordances.«¹¹⁸ Instead of relying on the concept of the creative genius¹¹⁹ where a highly talented and creative person goes against the mainstream of society and tries to disobey rules and regulations to fulfill their individual genius, Glăveanu proposes a shift from the person to becoming an actor that interrelates with their environment and other fellow humans, and ultimately becomes an agent who learns and adapts to situations and scenarios.¹²⁰

Instead of focusing on the internal dimensions of the creative process a human is involved in when creating and or acting in creative ways, Glăveanu envisions a broader concept where both, internal aspects of human creativity as well as external factors correlate and interact with each other. Within his 5 A framework, action takes on two properties, a psychological and a physical aspect that include structure, direction and meaning. In order to study any creative action, one must »pay attention to the domain of the creation, the characteristics of the creator, and features of the situation.«¹²¹ Action also includes goals and mental processes that allow us to build, make, generate, create and reflect as part of the process, an oscillation and refining of the actual moment in the context of the expected and planned outcome. Glăvea-

117 Glăveanu, Vlad Petre. »Rewriting the Language of Creativity: The Five A's Framework.« *Review of General Psychology* 17, no. 1 (March 2013): 69–81. <https://doi.org/10.1037/a0029528>.

118 Glăveanu, Vlad Petre. »Rewriting the Language of Creativity: The Five A's Framework.« *Review of General Psychology* 17, no. 1 (March 2013): 69–81. <https://doi.org/10.1037/a0029528>.

119 Gilbert, Elizabeth. »Your Elusive Creative Genius.« Presented at the TED Talk - Ideas Changing Everything, February 2009. https://www.ted.com/talks/elizabeth_gilbert_your_elusive_creative_genius?subtitle=en.

120 Glăveanu, Vlad Petre. »Rewriting the Language of Creativity: The Five A's Framework.« *Review of General Psychology* 17, no. 1 (March 2013): 69–81. <https://doi.org/10.1037/a0029528>.

121 Glăveanu, Vlad Petre. »Rewriting the Language of Creativity: The Five A's Framework.« *Review of General Psychology* 17, no. 1 (March 2013): 69–81. <https://doi.org/10.1037/a0029528>.

nu cites John Dewey who investigated and researched the many aspects of thought and thinking, as well as the creative process related to making art.¹²² Interested in developing a framework for teachers and educators to provide a more holistic learning experience and to bring out the best in pupils in school, Dewey offered a scientific approach to describe the many different kinds of thinking that happen in the human mind. While addressing various qualities of thinking such as reflection, imagination, openness, analysis, synthesis, Dewey encouraged educators to allow pupils various ways to experience thought and their individual thinking. These concepts are closely connected to creativity and creative thinking.¹²³

Glăveanu contends »that products are often considered in isolation not only from the processes leading up to them and the sociocultural context fostering their creation but from the person of the creator as well.« As an extension to the traditional »product« in Rhodes' 4 P creativity framework, Glăveanu argues that a creative product »is equally a product of cultural participation and thus an artifact or cultural »object«« and therefore should include that researchers include the socio-cultural influence on any creative production and therefore applying the term »artifact« to replace and enhance the term »product«. According to Glăveanu, artifacts carry two components – the physical attributes of any product, work and creation as well as the cognitive aspect of what the artwork or artifact means to the creator as well as to the observer.

Gadamer introduces a similar approach when reviewing and analyzing artworks by introducing the concept of hermeneutics, the multi-step process of analyzing creative products.¹²⁴ He suggested that the observer has to look at the artifact in three different levels, the actual meanings of the object, by describing the sheer facts and at the second level to interpret the artifacts' meaning incorporating the socio-cultural aspects of the time and place the

122 Glăveanu, Vlad Petre. »Rewriting the Language of Creativity: The Five A's Framework.« *Review of General Psychology* 17, no. 1 (March 2013): 69–81. <https://doi.org/10.1037/a0029528>.

123 Dewey, John. *How We Think*. Release Date: September 14, 2011 [EBook #37423]: D. C. HEATH & CO., PUBLISHERS BOSTON NEW YORK CHICAGO, 1910. <https://www.gutenberg.org/files/37423/37423-h/37423-h.htm>.

124 Davey, Nicholas, and Edward (ed.) Zalta. »Gadamer's Aesthetics - The Stanford Encyclopedia of Philosophy.« In *The Stanford Encyclopedia of Philosophy* »Gadamer's Aesthetics«, n.d. <https://plato.stanford.edu/archives/win2016/entries/gadamer-aesthetics/>.

artwork was created and the meaning the artist attributed and thought of while creating the product in a specific moment of time and place.¹²⁵ Rhodes described the third P in his 4 P framework as 'press' representing the social environment that influences the creative production. Since Rhodes and many researchers that applied his framework in their research focused on the environment as an independent and elusive entity, Glăveanu proposes the expansion of press and recommends moving from social press to »audience«. According to Glăveanu

»the concept of audience is preferred to deal with social forms of press because it turns the notion from abstract and less intuitive into a vivid image of multiple others assisting, contributing, judging, criticizing, or using the creative act and/or resulting artifact(s).«¹²⁶

Again, we are seeing an interrelation between the social environment and that of the creator as well as the artifact. A systems approach where the social environment is equally influenced by the artist and artwork as the artist and their process is affected by the environment. Glăveanu points out that »creative work requires (sometimes lengthy) periods of internalization, of learning or appropriating the artifacts, beliefs, and norms of one's cultural environment.«¹²⁷

Lastly, Glăveanu introduces the concept of affordances as he distinguishes the »social press« from the »material press«. He argues that »The existence of a material or physical press was rarely acknowledged by creativity researchers and psychologists at large« and proposes a connection between physical, material and spatial objects influencing the creator, their actions and their

125 Gadamer, Hans-Georg, Joel Weinsheimer, and Donald G. Marshall. *Truth and Method*. 2nd, rev. ed ed. Continuum Impacts. London; New York: Continuum, 2004.

126 Glăveanu, Vlad Petre. »Rewriting the Language of Creativity: The Five A's Framework.« *Review of General Psychology* 17, no. 1 (March 2013): 69–81. <https://doi.org/10.1037/a0029528>.

127 Glăveanu, Vlad Petre. »Rewriting the Language of Creativity: The Five A's Framework.« *Review of General Psychology* 17, no. 1 (March 2013): 69–81. <https://doi.org/10.1037/a0029528>.

products now considered artifacts as the audience influences the artifact with their own observations and interpretation of the artifacts and ultimately the actor.¹²⁸ Glăveanu compares his proposal to expand Rhodes' 4 P framework to that of the 5 A's in order to broaden the scope and reflect the complexity of actors, audiences and intermediaries being involved and influencing creativity. According to Glăveanu, his 5 A's framework

»draws inspiration from sociocultural sources, recent developments in cognitive science, and the legacy of ecological psychology to resituate the creator – the actor in our formulation – in a broader context of material, social, and cultural phenomena and relations.«

THE CREATIVE EXPERIENCE

Glăveanu and Beghetto introduced the concept of »creative experience« and propose a new definition to enhance and broaden the traditional and widely accepted definitions of creativity. They are interested in a humanistic approach that builds on the concept »human experience marks the encounter between the world«. ¹²⁹ This perspective builds on Rhodes' 4 Ps model of creativity that grounds human creativity as an activity that can happen in the life of regular people and not just those who are considered outstanding creatives. Human experience surrounds us on a daily basis and creativity does not seem to be an isolated activity but rather something that we all experience on a daily basis. According to Kaufman and Beghetto, a creators' creativity happens at a very personal and intimate level and is connected to personal experiences,

128 Glăveanu, Vlad Petre. »Rewriting the Language of Creativity: The Five A's Framework.« *Review of General Psychology* 17, no. 1 (March 2013): 69–81. <https://doi.org/10.1037/a0029528>.

129 Glăveanu, Vlad P., and Ronald A. Beghetto. »Creative Experience: A Non-Standard Definition of Creativity.« *Creativity Research Journal* 33, no. 2 (April 3, 2021): 75–80. <https://doi.org/10.1080/10400419.2020.1827606>.

thoughts, feelings and interpretations that happen at any given moment over a lifetime of a person.¹³⁰

Instead of focusing predominantly on the creative process and product, Glăveanu and Beghetto point out that creativity is being experienced in numerous situations and through various interactions when people come together and relate to each other. Therefore, creativity »becomes animated in our encounters and entanglements with the people, ideas, objects, projects, situations, uncertainties and actions of everyday life«. ¹³¹ During these encounters we experience small and large challenges and obstacles, situations we have to adjust to and possibly apply our imagination and creativity to deal with. This might be of significant importance as we are entering a new era where creativity is being influenced, enhanced and possibly challenged by artificial intelligence and systems associated with large language models and generative intelligence.

According to Glăveanu and Beghetto, creative experience takes place when a person experiences the world around them by »meaningful actions and interactions« that are influenced by characteristics such as »open-endedness nonlinearity, pluri-perspectives and future-orientation.« ¹³² Assuming the acceptance of this new definition we can see that creativity happens in everyday encounters and that it will be very difficult to measure as life does not take place in isolated lab situations and experiments. This definition has greater significance for using a methodology that captures individuals' personal experiences and unique interpretations of their own personal creativity as creativity might happen in professional settings and in their personal lives. This broadened definition of creativity becomes particularly important in my quest for interviewing former students about their own personal experiences in their personal and professional lives after having completed a creativity course years ago.

130 Kaufman, James C., and Ronald A. Beghetto. »Beyond Big and Little: The Four C Model of Creativity.« *Review of General Psychology* 13, no. 1 (March 2009): 1–12. <https://doi.org/10.1037/a0013688>.

131 Glăveanu, Vlad P., and Ronald A. Beghetto. »Creative Experience: A Non-Standard Definition of Creativity.« *Creativity Research Journal* 33, no. 2 (April 3, 2021): 75–80. <https://doi.org/10.1080/10400419.2020.1827606>.

132 Glăveanu, Vlad P., and Ronald A. Beghetto. »Creative Experience: A Non-Standard Definition of Creativity.« *Creativity Research Journal* 33, no. 2 (April 3, 2021): 75–80. <https://doi.org/10.1080/10400419.2020.1827606>.

CREATIVITY AND THE POSSIBLE

Glăveanu approaches creativity from a broader perspective and introduces the concept of the possible as a field of psychological research. He proposes incorporating aspects of human connection and interaction within society and sociocultural environments into creativity research.¹³³ Building on previously established frameworks that incorporate process, press and product, Glăveanu puts greater emphasis on the fact that while humans constantly involve and apply cognitive processes such as imagining the future, reflecting of the past, questioning the present, people are social creatures that constantly interact with each other and therefore influence each other's creative thinking as well as being influenced by others while constantly incorporating past, present and future thinking into our decision-making and creating process. Possibility is grounded in the understanding that openness is fundamental human trait that allows humans to be open to new experiences and open to each other and that that same openness provides a feedback loop influencing our decisions and experiences. Glăveanu's model assumes that people experience themselves as well as others and the perspectives that are formed by internal and external factors help us understand the world, we live in. Creativity then surfaces when these internal and external aspect interact with each other. According to Glăveanu, humans are »able to 'see' a problem, situation or issue from multiple perspectives« allowing them to »become freer, more flexible and more open-minded in relation to it.«¹³⁴

Creativity research has initially focused on disciplines such as psychology and sociology and has expanded into education, marketing and the arts, and grown exponentially in the last 15 years.¹³⁵ While several new creativity frameworks have been developed since Guilford's famous address and Rhodes' introduction of the creativity 4 P framework of Person, Process, Press and Product, similarities and connections exist among the frameworks devel-

133 Glăveanu, Vlad Petre. »The Possible as a Field of Inquiry.« *Europe's Journal of Psychology* 14, no. 3 (August 31, 2018): 519–530. <https://doi.org/10.5964/ejop.v14i3.1725>.

134 Glăveanu, Vlad Petre. »The Possible as a Field of Inquiry.« *Europe's Journal of Psychology* 14, no. 3 (August 31, 2018): 519–530. <https://doi.org/10.5964/ejop.v14i3.1725>.

135 Hernández-Torrano, Daniel, and Laura Ibrayeva. »Creativity and Education: A Bibliometric Mapping of the Research Literature (1975–2019).« *Thinking Skills and Creativity* 35 (March 2020): 100625. <https://doi.org/10.1016/j.tsc.2019.100625>.

oped by acclaimed creativity researchers such as Amabile, Csikszentmihalyi, Beghetto, Glăveanu, Kaufman, Lubart, Richards, Runco, Sawyer, Sternberg, and others. At the core, all frameworks include individual and highly personal aspects of a person (creator, actor), the cognitive processes they apply and the various external influencing factors such as culture, societal aspects, place and physical environment. Although creativity represents a complex field that includes numerous aspects influencing all aspects of the various frameworks, creativity is not stagnant, but something fluid and constantly in motion affected by constant and numerous drivers that change over times and influence the aspects person, process, product and place. Creativity is something that oscillates constantly and varies in intensity and we can acknowledge that it happens at any given moment in everyday life situations as well as highly professional settings.

As creativity research has expanded greatly and moved from focusing on the person and related aspects such as intelligence, genius, personality traits and characteristics, emotions, imagination, neurological activities in the brain when achieving the so-called Aha effect, to process (thinking styles, cognition, social system) and external factors such as press (cultural environment, zeitgeist, evolutionary) and place (physical space and culture, organization, group), products (ideas, design, patents, inventions, publications, poetry, songs) and persuasion, creativity research is expanding again and adding new methodical approaches to investigating creativity and its complexity.¹³⁶ Lebudă and Glăveanu seek to expand the body of creativity research by exploring »the social nature and context of creativity studies« and investigate how new methodologies as well as social interactions that provide new insights into the relationship of social dealings and creativity.¹³⁷

Other creativity researchers are seeking to expand the field of creativity research by accepting traditional concepts that creativity is highly personal and »informed by our imagination« and then adding a more holistic per-

136 Runco (2023), South Oregon University Creativity Conference, Keynote Speech – 6P Framework, 202305.

137 Lebudă, Izabela, and Vlad Petre Glăveanu. »Re/Searching the Social in Creativity, Past, Present and Future: An Introduction to the Palgrave Handbook of Social Creativity Research.« In *The Palgrave Handbook of Social Creativity Research*, edited by Izabela Lebudă and Vlad Petre Glăveanu, 1–9. Cham: Springer International Publishing, 2019. https://doi.org/10.1007/978-3-319-95498-1_1.

spective that recognizes that humans are a small part of the bigger world we live in.¹³⁸ As the complexity of creativity is being recognized, researchers are getting interested in more holistic and more long-term investigations about how humans experience creativity at a personal level over time. Ockuly researches creativity by incorporating aspects of personal development, transformation and by examining how imagination and possibilities take fruition and are part of an inner-personal process. Ockuly defines creativity as »the person-centered process of imagining possibilities and taking embodied expressive action to make your ideas real.«¹³⁹ She argues that creativity is highly personal and that defining creativity must represent the perspective of the creator and their creative processes. Rather than focusing on attributes like novelty, originality and usefulness, Ockuly proposes a framework that incorporates humanistic aspects and allowing creativity to take time and to develop over extended periods of time rather than evaluating creative productions and outcomes of human creativity as a short-term product.

CREATIVE LITERACY

Creative literacy has its origin in the term literacy, which describes a »continuous, multidimensional indicator of proficiency in using written language, with its higher levels reflecting an ability to draw logical inferences and think critically.«¹⁴⁰ Literacy describes the ability to read and write, and comprehend information that is presented in various media formats such as text, visuals, film and any other media. While literacy is grounded in »particular skills such as phonemic awareness, fluency, and comprehension« and has been associated

138 Ockuly, Marta, 2019/06/18, REIMAGINING THE WAY THE LIVED EXPERIENCE OF CREATIVITY IS DEFINED, INSPIRED, AND ENCOURAGED IN THE 21 ST CENTURY: A CREATIVITY PRACTITIONER/EDUCATOR'S HEURISTIC, Dissertation.

139 Ockuly, Marta, 2019/06/18, REIMAGINING THE WAY THE LIVED EXPERIENCE OF CREATIVITY IS DEFINED, INSPIRED, AND ENCOURAGED IN THE 21 ST CENTURY: A CREATIVITY PRACTITIONER/EDUCATOR'S HEURISTIC, Dissertation.

140 Wallendorf, Melanie. (2001). Literally Literacy. *Journal of Consumer Research*, 27 (4), 505–511. <https://doi.org/10.1086/319625>.

with the development of reading and writing skills in K-12 education, literacy researchers have expanded the term to encompass sociocultural aspects and investigate how people apply literacy in their lives.¹⁴¹

As humans learn how to read and write they learn how to comprehend the world and be an active participant in culture and society. The term literacy has been widely adopted to describe specific skills and competencies connected with specific areas that go beyond writing and reading, and have been used to describe computer literacy, media literacy, literary literacy, emotional literacy among others.¹⁴² Creative literacy has been associated with teaching and studying creative writing at the college and K-12 level. Studying literature and writing, particularly creative writing, was traditionally described as, and associated with literary literacy representing the learning, the reception and consumption of the written word.¹⁴³ Since the majority of graduates of writing programs are not writing published books but end up applying their creative writing skills in other areas of creative industries and creative productions such as films, video games, advertising commercials and marketing messages, Healey proposed that creative literacy should be its own designated literacy and include learning how to communicate, think and see.

According to Healey, creative literacy represents

»the skills and experience that students can gain from taking a Creative Writing class. It's not only the ability to make literary works, but more generally: the ability to use language (along with visual images and many other media) to produce complex emotional and psychological states in an audience; the ability to think and communicate in associative, metaphorical, non-linear, non-hierarchical ways; the ability to craft evocative stories with fully realized characters, perso-

141 Perry, Kristen. (2012). What is Literacy? – A critical overview of sociocultural perspectives. *Journal of Language and Literacy Education* [Online], 8 (1), 50-71. Available at http://jolle.coe.uga.edu/wp-content/uploads/2012/06/What-is-Literacy_KPerry.pdf.

142 Wallendorf, Melanie. (2001). *Literally Literacy*. *Journal of Consumer Research*, 27 (4), 505–511. <https://doi.org/10.1086/319625>.

143 Healey, Stephen P. (2009). *The Rise of Creative Writing and The New Value of Creativity* [Dissertation, University of Minnesota]. <https://conservancy.umn.edu/server/api/core/bitstreams/23aee473-97db-439b-82db-6cd2eee40d0e/content>.

nas, voices; the ability to manipulate or destabilize received meanings and to produce new meanings.«¹⁴⁴

Creative literacy is also associated with the connection of creative writing and the visual arts, representing the intersection of art, culture and writing, where the combination allows students to develop critical thinking skills, aesthetic sensibilities and »promotes exploration and risk-taking, as well as the appreciation of multiple perspectives.«¹⁴⁵ Creative literacy allows students to develop skills that enable them to move from literary consumption to becoming authors and creators of multi-disciplinary media productions and contributing actively and critically to various cultural fields.¹⁴⁶

CREATIVITY AND EDUCATION

Creativity exists in every human being and is closely connected to thinking and the many mental activities involved in processing, analyzing, utilizing and storing information, cognitive processes as well as the environment one lives in and the social interactions one is engaged in. Education is closely linked to creativity as creativity happens when children are in school, students are in college and adults are participating in continued education or workforce trainings.¹⁴⁷ The classroom has long been identified as a place where pupils' creativity happens and pupils can express and develop their

144 Healey, Stephen Peter. 2009. »The Rise of Creative Writing and The New Value of Creativity.« Dissertation, University of Minnesota. <https://conservancy.umn.edu/server/api/core/bitstreams/23aee473-97db-439b-82db-6cd2eee40d0e/content>.

145 Hrenko, Kelly A., and Andrea J. Stairs. 2012. »Creative Literacy: A New Space of Pedagogical Understanding.« *Across the Disciplines* 9 (3): 1–12. <https://doi.org/10.37514/ATD-J.2012.9.3.10>.

146 Kiosses, Spyros. 2019. »FOSTERING CREATIVE LITERACY: THEORETICAL CONDITIONS AND PEDAGOGY.« September.

147 Runco, Mark A. *CREATIVITY: THEORIES AND THEMES: RESEARCH, DEVELOPMENT, AND PRACTICE. SECOND EDITION*. AMSTERDAM: ELSEVIER, 2014.

creativity, granted that the teacher and the classroom environment impact how creativity shows up.¹⁴⁸

Early creativity research focused on examining the creative productions and performances achieved by so-called highly creative and talented individuals representing only a small section of society. Focusing primarily on the performative aspects of creativity limits the potential that teachers and educators have when helping children develop their creativity in educational settings. More recent research considers the fact that »creativity is widely distributed« in society and that every child has creative potential and the ability to engage in »construction of new meaning« by thinking, problem-solving and self-expression.¹⁴⁹ Runco proposed a greater emphasis on various kinds of thinking, critical as well as creative thinking and incorporating the creative process into education to allow students to practice the construction of »original interpretations that might lead to being useful and original, and ultimately will qualify as 'creative'«. ¹⁵⁰ As we have seen earlier in Lubart's 7 Cs framework, where education is represented by the seventh C – Curricula: Developing Creativity, creativity training has been identified as an important factor that can influence creativity in humans.¹⁵¹

There is overall agreement among researchers that particularly creative thinking skills, problem-solving skills, and divergent and convergent thinking skills can be improved through training programs. Many different training programs that foster creative thinking skills and particularly divergent thinking skills have been identified. Although creativity has not been considered a distinct academic subject one learns in a school environment or typical classroom, a shift in thinking has taken place in recent years. With an increased demand for soft skills such as communication, collaboration, creative thinking, critical thinking, adaptability, problem-solving, emotional intelligence amongst some others, a growing interest in teaching creatively and exposing children and young adults to creativity within the context of many different

148 Beghetto, Ronald A. »Creativity in Classrooms.« In *The Cambridge Handbook of Creativity*, edited by James C. Kaufman and Robert J. Sternberg, 2nd ed., 587–606. Cambridge University Press, 2019. <https://doi.org/10.1017/9781316979839.029>.

149 Runco, Mark A. 2008. »Creativity and Education.« *New Horizons in Education* v56 (n1).

150 Runco, Mark A. 2008. »Creativity and Education.« *New Horizons in Education* v56 (n1).

151 Lubart, Todd, & Thornhill-Miller, B. (2019). Creativity: An Overview of the 7C's of Creative Thought. *The Psychology of Human Thought*. <https://doi.org/10.17885/HEIUP.470.C6678>.

subjects, as well as teaching specifically for creativity has received special attention amongst educators, parents, policy makers and business people.¹⁵²

This increased interest is being reflected by the growing number of published academic journal articles during the last three decades. The majority of researchers focusing on creativity and education agree that anybody can be creative and display creative thought, and achieve creative accomplishments, and that education can influence an individual's creativity in positive ways.¹⁵³ Rae identified three interrelated factors that influence creativity and the development of creative skills among students in higher education and points to »conversations and relationships, liminal space and leadership.«¹⁵⁴ Creativity requires mental and physical space and attention from all constituents involved in the learning environment in order to flourish. Additionally, leaders must recognize the importance of creativity and its development and provide adequate support. To achieve this, it is best if the academic leaders remain learners themselves and exhibit creative characteristics such as self-awareness, empathy, and authenticity.¹⁵⁵

The growing interest in children's creativity and creative thinking skills around the world is also exhibited by the fact that the Organization for Economic Co-operation and Development (OECD), started assessing creative thinking skills in 15-year-old children worldwide as part of their assessment tool Programme for International Student Assessment (PISA). Traditionally, the PISA tool assesses skills in mathematics, science and reading.¹⁵⁶ While the PISA test focuses on testing the creative thinking skills of pupils within the K-12 school environment, the fact that creativity is being assessed among pupils can be interpreted as a call for increased teaching of creativity and creative thinking skills at the college level as well as in corporate training and adult learning.

152 World Economic Forum. Future of Jobs Report 2023. 17th ed. WEF Insight Report. Geneva: World Economic Forum, 2023. <https://www.weforum.org/reports/the-future-of-jobs-report-2023/>.

153 Hernández-Torrano, Daniel, and Laura Ibrayeva. »Creativity and Education: A Bibliometric Mapping of the Research Literature (1975–2019).« *Thinking Skills and Creativity* 35 (March 2020): 100625. <https://doi.org/10.1016/j.tsc.2019.100625>.

154 Rae, John. »Connecting for Creativity in Higher Education.« *Innovative Higher Education* 48, no. 1 (February 2023): 127–143. <https://doi.org/10.1007/s10755-022-09609-6>.

155 Rae, John. »Connecting for Creativity in Higher Education.« *Innovative Higher Education* 48, no. 1 (February 2023): 127–143. <https://doi.org/10.1007/s10755-022-09609-6>.

156 OECD. *PISA 2022 Assessment and Analytical Framework*. PISA. OECD, 2023. <https://doi.org/10.1787/dfe0bf9c-en>.

TEACHING CREATIVELY AND TEACHING FOR CREATIVITY

Many researchers acknowledge and agree that creativity trainings support creative behavior and lead to greater creativity, especially improved divergent thinking and original thinking in children and adults.¹⁵⁷ Numerous pedagogical approaches exist and some focus on the development of creative products and tactical skills, particularly in the education of so-called creative fields such as dance, music, design, art, theater, film among others. Other creative teaching strategies might focus on the cognitive processes and skills involved in creative thinking and focus on divergent and convergent thinking and train specific thinking methods, such as brainstorming. Additionally, creativity trainings might focus on the creative environment and foster creative collaborations. While each of the different training approaches offer distinct foci that are separate from each other, all approaches can help in the development of skills associated with creativity.

Among the many different pedagogical methods that can lead to increased creativity and creative thinking skills, two different perspectives are predominantly mentioned in the creativity literature – Teaching Creatively and Teaching for Creativity. Teaching creatively focuses on teaching any subject creatively and infusing creativity into how the subject is being taught and allowing students to experience creativity while they are studying any topic, might it be history, languages, mathematics or any other field. This requires teachers to be creative themselves and employ creative strategies that foster creativity in the classroom. The second main approach represents training programs and instructional modules that incorporate the concept teaching for creativity by focusing on creativity, creative thinking, creative process and learning about creativity and practicing creative thinking as a main learning objective.¹⁵⁸

157 Lubart, Todd, and Branden Thornhill-Miller. »Creativity: An Overview of the 7C's of Creative Thought.« *The Psychology of Human Thought*, 2019. <https://doi.org/10.17885/HEIUP.470.C6678>.

158 Wadaani, Majed. »Creativity and Human Development towards Self-Actualization.« In *Creativity in Teaching and Teaching for Creativity*, by Lucy Lunevich and Majed Wadaani, 45–62, 1st ed. Boca Raton: CRC Press, 2022. <https://doi.org/10.1201/9781003329145-5>.

Jeffrey and Craft examine the two different approaches to developing creativity in a study and conclude that the distinction between teaching creatively and teaching for creativity might be helpful to identify pedagogical approaches, but recommend an integration of both approaches and focusing more on »the relationship between teaching creatively and creative learning.«¹⁵⁹ While individual creativity experts, trainers, teachers and educators might prefer one specific approach, there is no clear scientific data available identifying that one particular method of teaching creativity and creative thinking is better suited for strengthening the overall creativity and creative behavior in students.¹⁶⁰

Scott et al. examined creativity training programs in a meta-analysis and discovered that the most effective trainings focus on developing cognitive skills and implement realistic exercises so that those newly developed creative skills can be practiced within a specific domain.¹⁶¹ This is in line with other findings that suggest that successful creativity trainings should include theoretical foundations and practical exercises, and the training programs should be of substantial length and allow participants to apply their newly gained creative thinking skills in real-world applications. Creativity researchers have also identified particular topics such as the creative process, curiosity, motivation, open-mindedness, risk-taking, emotional awareness, flexible thinking that can be infused into any classroom setting and course subject in order to improve creative thinking skills and creative behavior among students.¹⁶²

While enhancing creative thinking skills and improving creative behavior in children and adults has become the subject of growing interest, a singu-

159 Jeffrey, Bob, and Anna Craft. »Teaching Creatively and Teaching for Creativity: Distinctions and Relationships.« *Educational Studies* 30, no. 1 (March 2004): 77–87. <https://doi.org/10.1080/0305569032000159750>.

160 Özyaprak, Melodi. »Revealing Creativity: Exploring Success Components via Research and Experience.« Keynote Presentation presented at the Creativity Expert Exchange 2024, New York, NY, US - Virtual, March 1, 2024.

161 Scott, Ginamarie, Lyle E. Leritz, and Michael D. Mumford. »The Effectiveness of Creativity Training: A Quantitative Review.« *Creativity Research Journal* 16, no. 4 (October 2004): 361–388. https://doi.org/10.1207/s15326934crj1604_1.

162 Nickerson, Raymond S. Chapter 20 - »Enhancing Creativity.« In *Handbook of Creativity*, edited by Robert J. Sternberg, 392–430. Cambridge: Cambridge University Press, 1998. <https://doi.org/10.1017/CBO9780511807916.022>.

lar method to successful training does not seem to exist. Valgeirsdottir and Onarheim conducted a meta-analysis of 22 creativity program evaluations and confirmed the findings of Scott et al. that successful training programs should include four distinct areas:¹⁶³

1. »Teaching about cognitive theories of creativity.«
2. The theoretical part of the teaching »should be detailed in describing the cognitive and associative skills underlying creative effort« and represent a substantial part of the course.
3. Participants in the training should be able to apply the theoretical knowledge by »solving a real-world case in a co-operative learning environment.«
4. »Case material should be complemented by diverse exercises and tools to provide participants with practice in using relevant strategies and heuristics while solving the real-world case.«¹⁶⁴

Valgeirsdottir and Onarheim conclude that while creativity trainings overall lead to improved and increased creativity and certain key component of successful training programs have been identified, the question of »what makes one effective program better than the other remains unanswered.«¹⁶⁵

As many teaching approaches are working successfully, more research seems to be necessary in order to identify what exactly works how and for how long in order to produce the best results.

The main take-aways from the frameworks and insights presented in the literature review are the facts that creativity is complex, that creativity trainings work and successfully enhance creative thinking and creative behavior, and that creativity curricula should consist of certain components. Building creative capacity as well as developing, training, practicing and mastering cre-

163 Scott, Ginamarie, Lyle E. Leritz, and Michael D. Mumford. »The Effectiveness of Creativity Training: A Quantitative Review.« *Creativity Research Journal* 16, no. 4 (October 2004): 361–388. https://doi.org/10.1207/s15326934crj1604_1.

164 Valgeirsdottir, Dagny and Balder Onarheim. »Realistic Creativity Training for Innovation Practitioners: The Know–Recognize–React Model.« *Technology Innovation Management Review* 7 (2017): 5-15.

165 Valgeirsdottir, Dagny, and Balder Onarheim. »Studying Creativity Training Programs: A Methodological Analysis.« *Creativity and Innovation Management* 26, no. 4 (December 2017): 430–439. <https://doi.org/10.1111/caim.12245>.

ative thinking skills takes time. Therefore, it remains an open field to investigate how and to which degree creativity trainings can produce any long-term impact in children and adults and what this impact looks like.

There is a strong connection between the many concepts presented in the literature review and the course content as well as the pedagogical approach applied in the creativity course that all participants in the study completed. The main distinct areas identified in successful creativity training programs and mentioned in the literature review, have provided the foundation and building blocks of the creativity course the study is based on. A sample syllabus of the most recent iteration of the creativity course can be reviewed in Appendix 4. A visual overview of the course content, the main creativity frameworks covered and the pedagogical approach that all participants of this study experienced during the course can be seen in Chapter Three – Methodology, Section – Design and Procedures.

CHAPTER THREE: METHODOLOGY

The study investigated the process that takes place when humans experience the subject creativity during a creativity training, in particular, during a 14-week long college course that teaches creativity, creative thinking and creative process, and exposes subjects to the wide field of creativity. Additionally, this study focused on the perceived long-term impact and changes that might occur in connection with creativity training.



Figure 3-1. The Process of Students experiencing the Subject Creativity in Education and its long-term Impact.

Over 200 undergraduate and graduate students completed my creativity course (MK342 Breakthrough Thinking in Marketing Communication, MK636 Creative Thinking and Problem Solving) in the Department of Marketing Communication at Emerson College within the last 10 years. In the following, I will further describe the study design, the methods used in this research as well as the criteria for selecting the participants and data collection method.

The American psychiatrist Bessel van der Kolk describes his research within the field of psychiatry and mental health by citing his teacher »Be skeptical of textbooks. We have only one real textbook— our patients.«¹ Although students are not considered patients, they represent human ‘subjects’ who experience life, and can share and speak about their personal experiences related to specific subjects, in this case, a creativity course, to access personal insights gained through individual experiences. It appeared obvious that I should go

1 Van der Kolk, Bessel A. *The Body Keeps the Score: Brain, Mind and Body in the Healing of Trauma*. New York, NY: Penguin Books, 2015.

back to those who learned about subjects like creativity, creative process and creative thinking during a college-based course. Bessel recommends a qualitative approach to research when investigating topics that are complex and personal. According to Bessel »we should trust only what we could learn from them [the patients] — and from our own experience.«²

This suggests using a qualitative method in order to find insights into personal experiences on any subject and implies asking the person who has studied creativity during a college-based course. Although creativity, creative abilities and creative thinking can be assessed and measured through various tests and assessment tools, this study sought to uncover some insights from the perspective of the person (Rhodes)³ or the actor (Glăveanu)⁴ that is based on individual and personal reflection of processes and integrates the aspects of how creativity happens at a small and a large level (Kaufman, Beghetto)⁵ and everyday (Richards)⁶ at a personal and intimate level.

QUALITATIVE RESEARCH

Different qualitative methods can be applied within qualitative research and Creswell describes five approaches – Narrative Research, Phenomenology, Grounded Theory, Ethnography and Case Study.⁷ According to

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- 2 Van der Kolk, Bessel A. *The Body Keeps the Score: Brain, Mind and Body in the Healing of Trauma*. New York, NY: Penguin Books, 2015.
 - 3 Rhodes, Mel. »An Analysis of Creativity.« *The Phi Delta Kappan* 42, no. 7 (1961): 305–10.
 - 4 Glăveanu, Vlad Petre. »Rewriting the Language of Creativity: The Five A's Framework.« *Review of General Psychology* 17, no. 1 (March 2013): 69–81. <https://doi.org/10.1037/a0029528>.
 - 5 Kaufman, James C., and Ronald A. Beghetto. »Beyond Big and Little: The Four C Model of Creativity.« *Review of General Psychology* 13, no. 1 (March 2009): 1–12. <https://doi.org/10.1037/a0013688>.
 - 6 Richards, Ruth, ed. *Everyday Creativity and New Views of Human Nature: Psychological, Social, and Spiritual Perspectives*. 1st ed. Washington, DC: American Psychological Association, 2007.
 - 7 Creswell, John W., and John W. Creswell. *Qualitative Inquiry and Research Design: Choosing among Five Approaches*. 3rd ed. Los Angeles: SAGE Publications, 2013.

Merriam, qualitative research studies »seek to discover and understand a phenomenon, a process, or the perspectives and worldviews of the people involved«. ⁸ Denzin and Lincoln describe qualitative research as an inquiry into finding new truths where the researcher is actively involved in the information processing and is located as »the observer of the world«, who interprets the world through a set specific practice making »the world visible«. ⁹ The interpretations can consist of numerous sources and representations such as »field notes, interviews, conversations, photographs, recordings, and memos to the self«. ¹⁰ Instead of conducting experimental studies or observing people in lab situations, qualitative research methods allow the researcher to investigate people in their normal environment. While engaging in qualitative research, the researcher is an active participant in the study and collects and interprets data, adds personal knowledge, experience, biases and different perspectives to the research process. During the data analysis the researcher identifies themes and concepts while following an inductive process during which the researcher switches back and forth between the data and the themes. ¹¹

Since qualitative research is being employed »when a situation or issue needs to be explored rather than hypotheses need to be proven wrong or true«, ¹² a qualitative approach was selected for this study in order to enable the individual perspective of the research participants to emerge. This allowed for individual contributions and reflections on the core topic while the interviewee was able to pivot, reflect and share deeply personal thoughts.

8 Merriam, Sharan B. *Case Study Research in Education: A Qualitative Approach*. 1st ed. The Jossey-Bass Education Series. San Francisco: Jossey-Bass, 1988.

9 Denzin, Norman K., and Yvonna S. Lincoln. »Introduction: The Discipline and Practice of Qualitative Research.« In *The Sage Handbook of Qualitative Research*, 3rd Ed., 1–32. Thousand Oaks, CA: Sage Publications Ltd, 2005.

10 Denzin, Norman K., and Yvonna S. Lincoln. »Introduction: The Discipline and Practice of Qualitative Research.« In *The Sage Handbook of Qualitative Research*, 3rd Ed., 1–32. Thousand Oaks, CA: Sage Publications Ltd, 2005.

11 Denzin, Norman K., and Yvonna S. Lincoln. »Introduction: The Discipline and Practice of Qualitative Research.« In *The Sage Handbook of Qualitative Research*, 3rd Ed., 1–32. Thousand Oaks, CA: Sage Publications Ltd, 2005.

12 Creswell, John W., and John W. Creswell. *Qualitative Inquiry and Research Design: Choosing among Five Approaches*. 3rd ed. Los Angeles: SAGE Publications, 2013.

This methodological approach acknowledges that the researcher applies a ground up approach that incorporates the researcher's perspectives and assumptions. Instead of following a specific theoretical approach or one particular perspective, the study follows an inductive process that is influenced by the interviewee's contributions as well as my own research perspective.¹³

As this research seeks to learn how former students of a creativity course have been shaped and influenced by what they have learned, this research explores how the former students have incorporated knowledge related to creativity training in their personal and individual lives and seeks to learn from their subjective perspectives. This study relies much on the participants' personal perspective and views, and incorporates how these are being shaped by the participants' environment, and employs the interpretative framework of social constructivism¹⁴ The research questions have been designed to represent a broader context rather than address very specific aspects of creativity. In this particular way, I, as the researcher, embedded myself by interpreting the participants' responses through my own personal experiences gained over several decades of teaching and studying creativity. Therefore, I decided to apply a Grounded Theory and particularly, a Constructivist Grounded Theory approach to conduct the study.

GROUNDED THEORY

Grounded theory emerged in the mid 1960's when two American sociologists Barney Glaser and Anselm Strauss investigated what and how people experience when they were terminally ill. Having been trained as quantitative researchers, Glaser at Columbia University and Strauss at the University of Chicago, both were looking for additional information to support their scholarly investigations and developed the grounded theory approach.

13 Creswell, John W., and John W. Creswell. *Qualitative Inquiry and Research Design: Choosing among Five Approaches*. 3rd ed. Los Angeles: SAGE Publications, 2013.

14 Creswell, John W., and John W. Creswell. *Qualitative Inquiry and Research Design: Choosing among Five Approaches*. 3rd ed. Los Angeles: SAGE Publications, 2013.

Grounded theory is »derived from data and then illustrated by characteristic examples of data«, and based on an inductive approach to analysis and the understanding that any data will tell a story and unveil some truth. Instead of building a hypothesis and investigating if the data might fit some hypothesis, the grounded theory approach tries to start with the data first and explore what concepts, themes and theories might emerge.¹⁵

Based on their individual educational backgrounds and academic trainings, Glaser and Strauss added and combined two competing traditions in sociology – positivism and pragmatism and field research into their grounded theory methodology. Glaser's rigorous training in quantitative methods provided the foundation to include epistemological assumptions, logic, and systematic approach in grounded theory and he was interested in codifying qualitative research methods similarly to what quantitative researchers had done. Strauss considered humans as active agents who play an active role in their lives, and he considered the process of human existence more important than the structures humans live in. According to Charmaz, »Strauss brought notions of human agency, emergent processes, social and subjective meanings, problem-solving practices, and the open-ended study of action to grounded theory.¹⁶

Glaser and Strauss developed the grounded theory concept together but later went different paths as Glaser stayed committed to the original understanding and motto that the data should always remain at the core and guide the results. Strauss added his personal perspective and further developed grounded theory to include the researcher's perspective, where theory and the researcher's knowledge and expertise are being incorporated and added to the analysis of the data. While there is no hypothesis to be tested in grounded theory, the researcher with their knowledge leads an active role to narrow and select how the data should be analyzed¹⁷

Within grounded theory, hypotheses and concepts emerge directly from the data during the research process. The goal of grounded theory is the emer-

15 Glaser, Barney G., and Anselm L. Strauss. *The Discovery of Grounded Theory: Strategies for Qualitative Research*. London New York: Routledge, 2017.

16 Charmaz, Kathy. *Constructing Grounded Theory*. 2nd edition. *Introducing Qualitative Methods*. London ; Thousand Oaks, Calif: Sage, 2014.

17 Glaser, Barney G., and Anselm L. Strauss. *The Discovery of Grounded Theory: Strategies for Qualitative Research*. London New York: Routledge, 2017.

gence and development of a theory that provides new insight into the subject of discovery. According to Glaser and Strauss, »generating a theory from data means that most hypotheses and concepts not only come from the data, but are systematically worked out in relation to the data during the course of the research.¹⁸ The systematic analysis of all data is guided by two main principles that Glaser and Strauss developed: theoretical sampling and constant comparison.

Theoretical sampling embodies the process of data collection during which the researcher collects, codes and analyzes data and determines which data to collect next in order to address holes and ultimately leading to an emerging theory. Strauss and Corbin further added that »grounded theories, because they are drawn from data, are likely to offer insight, enhance understanding, and provide a meaningful guide to action.¹⁹

Constant comparison means that a comparison takes place during every phase of the data collection, data analysis, interpretation and emergence of a theory, and

»that every part of data, i.e. emerging codes, categories, properties, and dimensions as well as different parts of the data, are constantly compared with all other parts of the data to explore variations, similarities and differences in data. The constant comparative method of grounded theory is strict enough to be helpful to the researcher in exploring the content and meaning in the data, but not saddled with so many strict rules to be too rigid for a grounded theory researcher.²⁰

18 Glaser, Barney G., and Anselm L. Strauss. *The Discovery of Grounded Theory: Strategies for Qualitative Research*. London New York: Routledge, 2017.

19 Strauss, Anselm L., and Juliet M. Corbin. *Basics of Qualitative Research: Grounded Theory Procedures and Techniques*. Newbury Park, Calif: Sage Publications, 1990.

20 Charmaz, Kathy. *Constructing Grounded Theory*. 2nd edition. *Introducing Qualitative Methods*. London; Thousand Oaks, Calif: Sage, 2014.

CONSTRUCTIVIST GROUNDED THEORY

Charmaz further developed grounded theory and stated that

»constructivist grounded theory adopts the inductive, comparative, emergent, and open-ended approach of Glaser and Strauss's original statement. It includes the iterative logic that Strauss emphasized in his early teaching, as well as the dual emphases on action and meaning inherent in the pragmatist tradition.²¹

Grounded theory was developed as an empirical perspective where the data is objective, holds the real value and truth and is independent from any historical and social context the data might stem from. Charmaz stated that

»objectivist grounded theory erases the social context from which data emerge, the influence of the researcher, and often the interactions between grounded theorists and their research participants.²²

According to Charmaz, »an objectivist grounded theorist assumes that data represent objective facts about a knowable world.²³

Charmaz did not agree with the objectivity that Glaser and Strauss and later Strauss and Corbin associated with the data and argued that even the purest data represents something that connects back to the participants and their realities and that those realities need to be interpreted and incorporated into the analysis as well. Charmaz developed the constructivist grounded theory based on the fact that

21 Charmaz, Kathy. *Constructing Grounded Theory*. 2nd edition. Introducing Qualitative Methods. London; Thousand Oaks, Calif: Sage, 2014.

22 Charmaz, Kathy. *Constructing Grounded Theory*. 2nd edition. Introducing Qualitative Methods. London; Thousand Oaks, Calif: Sage, 2014.

23 Charmaz, Kathy. *Constructing Grounded Theory*. 2nd edition. Introducing Qualitative Methods. London; Thousand Oaks, Calif: Sage, 2014.

»a constructivist approach places priority on the studied phenomenon and sees both data and analysis as created from shared experiences and relationships with participants and other sources of data.²⁴

This approach requires the researcher to not only be actively engaged in the collection and analyses of all the data points, but demands that the researcher studies »how and sometimes why participants construct meanings and actions in specific situations« and interpret the data by becoming an active contributor and participant in the scholarly inquiry, in which the researcher adds value to the research process. Charmaz stated that

»a constructivist approach theorizes the interpretive work that research participants do, but also acknowledges that the resulting theory is an interpretation. The theory depends on the researcher's view; it does not and cannot stand outside of it.²⁵

Due to the complex nature of creativity and due to the fact that the investigation focused on the process taking place when a human subject experiences the subject creativity, constructivist grounded theory provided an excellent methodology and research framework, and emerged as the logical approach for the investigation. As I was interested in learning more about any potential long-term effects creativity training might have, I was drawn to hearing from former students who have taken my creativity course during college. Another reason for using a constructivist grounded theory approach was the fact that, to my knowledge, no other qualitative research exists to date that explored any potential long-term impact of creativity trainings from the perspective of the human subject who experienced the subject creativity. This meant that there was a potential opportunity to not only gain new insights about the

24 Charmaz, Kathy. *Constructing Grounded Theory*. 2nd edition. Introducing Qualitative Methods. London; Thousand Oaks, Calif: Sage, 2014.

25 Charmaz, Kathy. *Constructing Grounded Theory*. 2nd edition. Introducing Qualitative Methods. London; Thousand Oaks, Calif: Sage, 2014 (page 239).

process but that a new theoretical concept might emerge. As creativity is considered a foundational human capability and a skill that many societies, organizations, companies and individuals value, it seems appropriate to take a closer look and investigate if and how creativity training can enhance peoples' personal and professional life

DESIGN AND PROCEDURES

As described above, a qualitative approach and in particular, Constructivist Grounded Theory was chosen as the best and most appropriate methodology to access information that investigates any connections between a creativity course taken many years ago and the time since that course was taken. In order to investigate any perceived long-term impact, I focused on former students, who completed a creativity course at least one year prior to any interview and a maximum of 10 years between the completion of the course and when the interview took place. This meant that in some cases, up to 10 years of professional and personal life experiences had been added on to the classroom instruction and course learning experience. Empirically, any potential long-term impact can only be investigated if a significant amount of time has passed since the creativity training took place. Tymms et al. studied the long-term impact of effective teaching in elementary students and examined a 10-year time frame after the teaching took place²⁶ Li investigated the impact of higher education and reviewed data during a 10-year period post-graduation²⁷ Nye et al. examined the long-term effects of a small class size five years after the educational experience took place²⁸ Based

26 Tymms, P., Merrell, C., & Bailey, K. (2018). The long-term impact of effective teaching. *School Effectiveness and School Improvement* 29 (2), 242–261. <https://doi.org/10.1080/09243453.2017.1404478>.

27 Li, Xiaohui S. (2021). What Impacts Young Generations' School/College Education Through the Lens of Family Economics? A Review on JFEI Publications in the Past Ten Years. *Journal of Family and Economic Issues*, 42(S1), 118–123. <https://doi.org/10.1007/s10834-020-09726-4>.

28 Nye, Barbara, Hedges, L. V., & Konstantopoulos, S. (1999). The Long-Term Effects of Small Classes: A Five-Year Follow-Up of the Tennessee Class Size Experiment. *Educational Evaluation and Policy Analysis*, 21 (2), 127–142. <https://doi.org/10.3102/01623737021002127>.

on existing literature and the fact that my course was well established and fine-tuned by 2013, the time span of at least one year and up to 10 years after the course completion seemed to provide an appropriate timeframe for the study.

Since the completion of the creativity course, the participants in the study have lived their lives and experienced personal development in their natural environments away from college and any educational environment. At the time of the interviews, they were able to share anything related to how they experienced creativity during the course as well as touch upon if and how the course might relate to how creativity has shown up in their personal and professional life in the years after the course was completed.

The following course description provides some context regarding the topics the participants in the study experienced during the course.

This course is designed to explore the nature of creativity, creative thinking and creative problem solving. We will investigate how creativity, creative thinking, creative problem solving (CPS), and visual communication influence our world, and especially the business of global marketing communication. We will look at creativity theorists, famous artists, innovators, scientists, and creative marketing practitioners from around the world to see how the influence and principles of creative thinking and CPS can be used as a way of self-expression but also as tools to develop successful business and marketing strategies, innovate, and solve business problems. In addition, you will also learn and practice various tools and techniques to develop more flexible thinking and effective marketing communication messages.

In this course, you will be exposed to Creativity, the Creative Process and Creative Strategies, Idea Development and Creative Concepts, as well as History of Creativity Research and current events. Additionally, the course will familiarize you with the nature of creativity, both as an inherent human activity and as an enlivening capacity to be nurtured and developed. You will be given numerous assignments, some of which will be produced in sketchbooks and drawing

pads, and some with software you might be familiar with, such as Adobe Creative Suite, e.g. PhotoShop, InDesign and/or other related programs. There will be several presentations throughout the course, to facilitate the sharing of ideas and hone effective and innovative presentation skills.

Learning Goals and Outcomes – This course will enable you:

To develop a critical understanding of concepts, theories and trends in creative and strategic thinking as well as problem solving.

To learn how to develop creative strategies and creative concepts, and write creative briefs.

To analyze and evaluate ideas and concepts according to their potential in the realm of (new) product or services development, and marketing communication objectives.

To facilitate creative processes in groups and manage for creativity (and innovation) in organizations.

To develop creative solutions for the challenges posed by the current marketing communication environment.

The following figure provides an overview of the course content and main creativity frameworks covered during the course, and highlights the pedagogical approach and training period.

For this study I used Charmaz' Constructivist Grounded Theory method and investigated the following research questions:

1. How have the former students experienced the creativity course?
2. What do the former students remember from the course?
3. What concepts the former students had been exposed to during the creativity course might they retain?

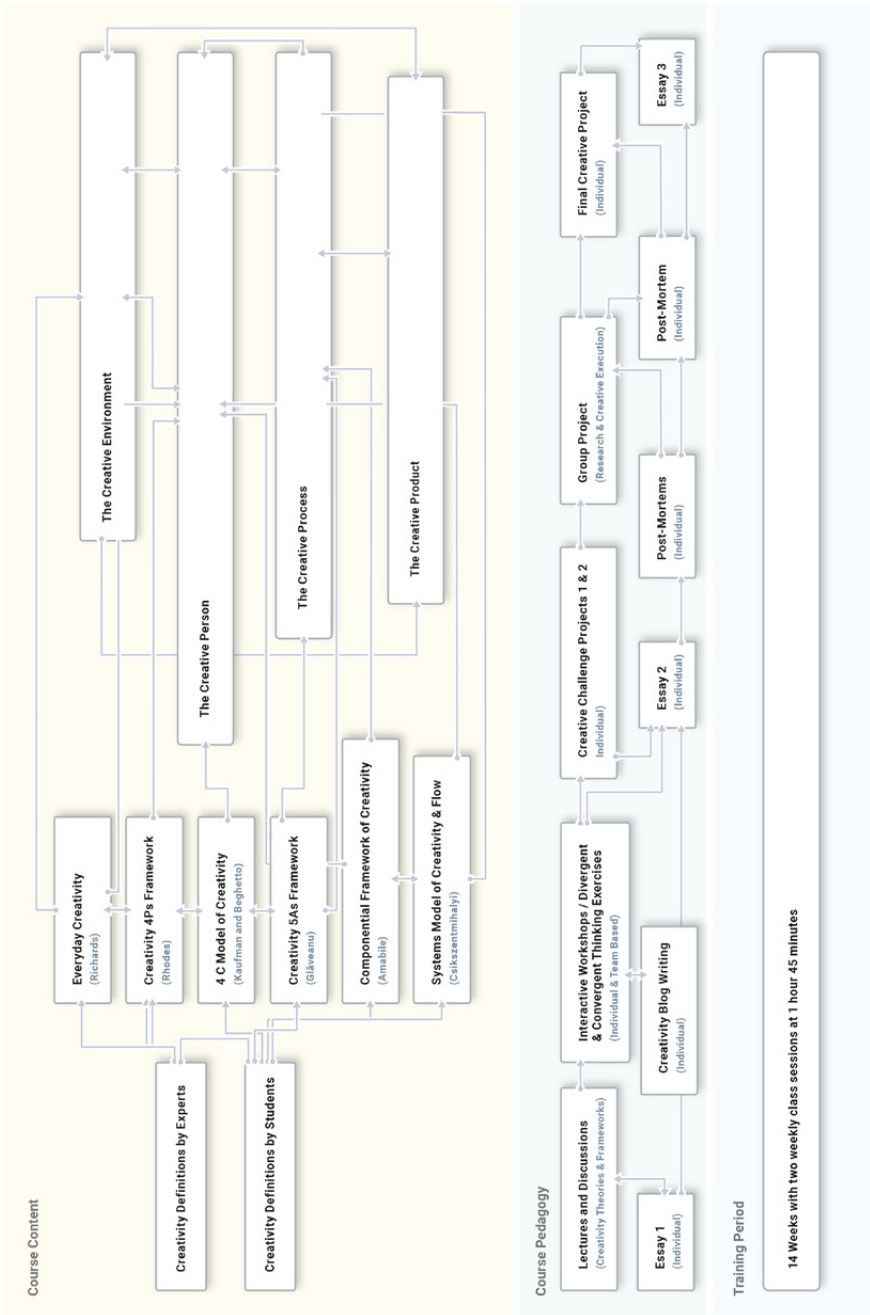


Figure 3-2. Overview of the course content, pedagogical approach and training period.

4. What role does creativity play in the former students' lives after the completion of the course?
5. How might they practice and possibly further develop their own creativity after the completion of the creativity course?
6. What possible long-term effect might the course experience have generated?

PARTICIPANTS

Based on former student lists and academic records, over 200 former students were identified that completed a creativity course during the last decade. Yet, the contact information and email addresses from old class lists and academic records had changed over the years and it became difficult and sometimes impossible to reach out to every former student who had completed a creativity course. Therefore, LinkedIn was identified as the best platform tool to find former students with a high probability of correct contact information. I identified former students via LinkedIn and asked them if they would be interested in participating in a research study. After several months of identifying suitable participants for the study, a total of 116 former students were found and correct email addresses had been collected. Then, 26 former students were selected through a randomized process and invited via email to participate in the research study. 20 former students responded to the initial invitation, 18 agreed to participate in the study and video interviews via Zoom were scheduled. Due to conflicting schedules, two participants, who initially agreed to participate, were no longer able to do so. While the first 16 interviews took place, additional former students responded late to the initial invitation sent out via email and offered to participate in the study as well. Based on constant comparison and theoretical sampling, these additional responses were added to the initial pool of suitable participants. Then, a second round of randomization took place and additional former students were invited to the participate in the study. In the end, a total of 30 former students participated in the interviews. The invitational email to participate in the study is listed in Appendix 1.

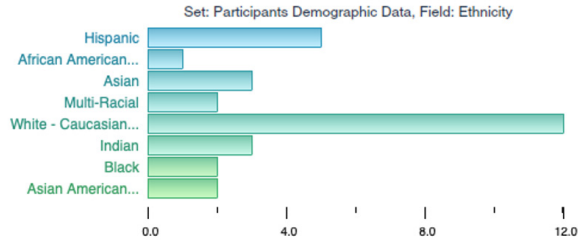


Figure 3-3. Demographic information of participants – Ethnicity

A total of 30 individuals from 13 different countries representing ethnicities such as White Caucasian, Indian, Black, African American, Asian, Asian American, Hispanic and Multi-Racial backgrounds participated in the study. All participants completed a creativity course during which they learned about and experienced creativity, creative thinking, and creative process and problem-solving at least one year and no more than 10 years prior to the interview.

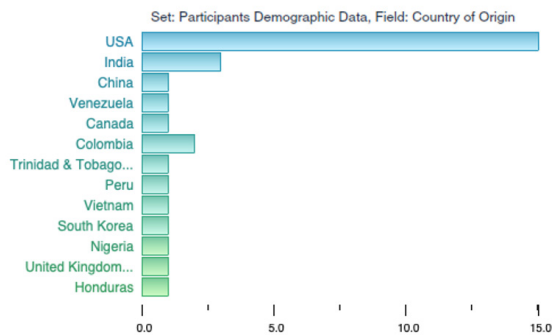


Figure 3-4. Demographic information of participants – Country of Origin.

The participants' countries of origin are Honduras, United Kingdom, Nigeria, South Korea, Vietnam, Peru, Trinidad & Tobago, Columbia, Canada, USA, India, China and Venezuela.

53.3% of the participants completed an undergraduate course in Creative Thinking and Problem-Solving and 46.7% finished a graduate course in Creative Thinking and Problem-Solving.

66.7% of the participants identified as female and 33.3% as male.

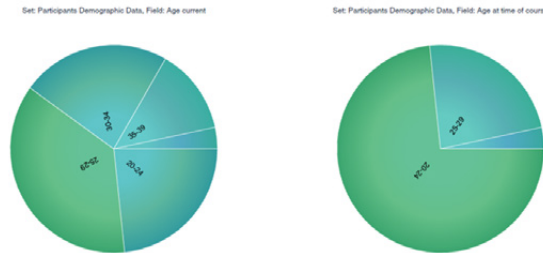


Figure 3-5. Demographic information of participants – Age current and at time of course

The participants' age at the time of the interview ranged from 20-24 years of age to 40-44 years of age. The participants' age at the time when they experienced the course ranged from 20-24 years of age to 30-34 years of age.

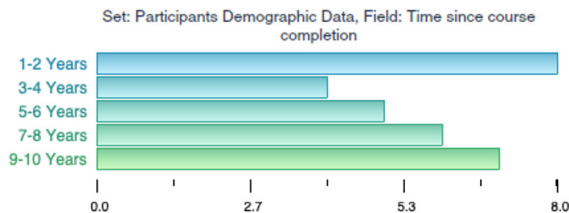


Figure 3-6. Demographic information of participants – Time since course completion

Eight participants (26.7% of all participants) completed the course 1-2 years prior to when the interview took place. Four participants (13.3%) completed the course 3-4 years, five participants (16.7%) completed the course 5-6 years, six participants (20%) completed the course 7-8 years and seven participants (23.3%) completed the course nine to ten years prior to when the interview took place.

At the time of the interviews, the participants held professional positions in the following fields: Research, Design, Product Management, Production,

Digital Marketing, General Management, Brand Management, Advertising, Account Management, Marketing & Data Analytics, Strategic Planning, Marketing Communication, Sales, Content Creation, Business Development, Creative Direction, and worked in industries such as Entertainment (Gaming), Entertainment (Theater & Arts), Consumer Packaged Goods, Technology, Entertainment (Sports), Consumer Good [Jewelry], Education, Food, Advertising & Marketing, Entertainment (Film, TV, Music), Bio-Tech / Pharmaceutical, Industrial (Energy), Finance, Manufacturing, Media (Publishing and News).

DATA COLLECTION

A total of 30 semi-structured open-ended in-depth interviews were conducted and provided the main data source for the study. The interviews lasted a minimum of one hour to a maximum of 2 hours. All interviews were conducted via Zoom video calls, videorecorded and then transcribed. Multiple transcription services such as REV, which included transcription by a human and transcription by an AI system, NVivo and Zoom Transcription were tested prior to the interviews. After an analysis of accuracy and quality of the transcription, it was determined to transcribe all interviews via the REV AI system. At the beginning of each interview several questions regarding the participants' demographics were posed

A fundamental approach to grounded theory is that during interviews the researcher makes sure to elicit the participants story and allows that participants tell their story from their own personal perspective and in their terms. A study that uses grounded theory ought to explore the experience and the problem addressed during an interview by starting with the question »What is happening here?²⁹

Based on Charmaz' constructivist grounded theory approach, an interview protocol was developed to explore if, what and how participants experienced creativity during the course and since its completion in their personal and professional lives. As Charmaz points out, the participants should have the opportunity to reflect on their process in the most open way with as little

29 Charmaz, Kathy. *Constructing Grounded Theory*. 2nd edition. Introducing Qualitative Methods. London; Thousand Oaks, Calif: Sage, 2014 (page 86).

guidance from the interviewer as possible. In order to accomplish this and provide each interviewee with the opportunity to speak openly about the process they went through as they were experiencing creativity during and after the course, I followed and adopted Charmaz' interview script guidelines, and opened the interviews with the question »Could you please tell me everything that is involved in you having experienced the creativity course and how your life went on since then?³⁰

In order to emphasize the constructivist approach to grounded theory, I followed Charmaz' guidelines and instead of focusing on chronology, events and problems that the participant might encounter, made sure to elicit each participant's' definition of terms, situations, and events and tapped into their assumptions and meanings³¹

Throughout the data collection and analysis, triangulation was applied. Triangulation refers to utilizing »multiple and different sources, methods, investigators and theories to provide corroborating evidence.³² Triangulation also means »the combination of two or more theories, sources of data, research methods, in the study of a singular phenomenon.^{33 34} While the interviews provided the main data source for the study, memos, teaching notes, auto-ethnographic reflections, notes from academic conference presentations and personal notes about existing theories were added to the analysis.

DATA SOURCES

Interviews | 30 semi-structured open-ended in-depth interviews were used as the primary data source. All interviews lasted more than one hour and five

30 Charmaz, Kathy. *Constructing Grounded Theory*. 2nd edition. Introducing Qualitative Methods. London; Thousand Oaks, Calif: Sage, 2014 (page 239).

31 Charmaz, Kathy. *Constructing Grounded Theory*. 2nd edition. Introducing Qualitative Methods. London; Thousand Oaks, Calif: Sage, 2014 (page 95).

32 Creswell, John W. *Qualitative Inquiry and Research Design: Choosing among Five Approaches*. 3rd ed. Los Angeles: SAGE Publications, 2013.

33 Denzin, Norman K. (1989). *The research act: A theoretical introduction to sociological methods* (2nd ed.). New York: McGraw-Hill.

34 Kimchi, Judith, Polivka, B. and Stevenson, J. S. »Triangulation: Operational Definitions.« *Nursing Research* 40, no. 6 (1991): 364–366.

interviews lasted up to two hours. The interviews included a short section to elicit participants' demographic information and up to 26 questions to explore the process during which the participants experienced the subject creativity during the course and since its completion.

The demographic portion of the interview included the following questions:

- What gender do you identify with?
- How do describe your race?
- What is your country of origin?
- What was your education level at the time of the course - undergraduate or graduate?
- What age were you when you took the course?
- What is your current professional field?
- What is your current job title?
- Where do you currently reside?
- Do you remember the creativity course you took?
- Do you remember what year or semester you took the course? How many years ago was that?

The non-demographic questions addressed the process that each participant experienced as they went through the 14-week-long course and learned about the subject creativity. The questions also addressed the time after the course had been completed and tapped into any experiences that relate to creativity and how participants have experienced creativity in their personal and professional lives since the course as completed. Throughout the interviews, I paid attention to each participant's story as well as silences that occurred. Through active listening, each interview was documented with real-time note-taking and while I focused on what was said and shared, I made sure to listen and to identify any aspects related to the topic a participant did not say. From the constructivist perspective, the interview then became what Charmaz calls a »site of exploration, emergent understandings, legitimation of identity, and validation of experience.³⁵

35 Charmaz, Kathy. *Constructing Grounded Theory*. 2nd edition. Introducing Qualitative Methods. London; Thousand Oaks, Calif: Sage, 2014 (page 91).

The questions were designed to allow participants to share their personal stories, to speak about the meaning creativity holds for them, how they define creativity in their own words and their feelings associated with creativity. Throughout the interviews, the focus lied on the personal stories that emerged from the participants as well as any shared information that might connect any learnings, practices or take-aways back to the course experience. The questions were also sufficiently focused to elicit data that would allow participants to provide insights into any unanswered theoretical questions.

The complete interview protocol can be seen in Appendix 3. Several of the questions included in the interview guide are:

7. Could you please tell me everything that is involved in you having experienced the creativity course and how your life went on since then?
8. What were you thinking then?
9. What were you feeling then?
10. What if anything, did you know about creativity before the course?
11. How would you describe the person you were before the course?
12. Could you tell me your thoughts and feelings after having experienced creativity in the course?
13. Could I ask you to describe the most important lessons you learned through experiencing creativity in the course?
14. How have you experienced your own creativity since you took the course?
15. Were there any changes you added into your life based on the creativity course experience?
16. If yes, tell me what happened.
17. What were you thinking?
18. Is there anything else you would like to share?
19. Is there something else you think I should know to understand creativity better?
20. Is there anything you would like to ask me?

ETHICAL CONSIDERATIONS

In order to ensure anonymity, all names of the participants had been changed and pseudonyms were given, and no information can be traced back to the interviewees. Only the primary investigator, and if needed, the academic supervisors had access to the data. All data was stored on a highly secured, encrypted and password protected cloud-based server provided by my university.

During the recruitment phase, all participants were provided with an IRB approved document 'Guidelines for participating in the study' (see Appendix 2) informing the participants about the purpose, the length of the interview, voluntary and unpaid participations, potential benefits, potential risks or discomforts, privacy protection and a contact information in case any questions might occur.

Prior to the start of the interviews, participants were informed that they could refuse answering any questions and that they could withdraw from the study if they wished without any consequences.

CHAPTER FOUR: ANALYSIS OF THE DATA

OVERVIEW

All 30 interview transcriptions were analyzed manually and then input into data analysis software applications for additional analysis. I used NVivo 14 for Mac for the first eight interviews. NVivo is a qualitative research and data analysis software application that allows sorting and reviewing of large data sets. Due to a hardware upgrade and purchase of a new desktop computer during the research study and a consequential software – hardware incompatibility that arose between my new Apple Mac Studio and NVivo, I switched to Dedoose. Dedoose is a secure cloud-based research and data analysis software that supports qualitative and mixed methods research, and was developed by university researchers. All existing data was exported from NVivo and imported into Dedoose and then Dedoose was used for the analysis of all 30 interviews as well as for text management and comparison between demographic classification of interviewees (age, country of origin, time since course was completed).

Each interview was recorded on video and transcribed. Additionally, I took notes real-time during each interview while I processed the information shared by the interviewee. I used the interview guide and made first initial notes, added my personal comments to specific words or sentences that stood out and made connections to aspects that had been mentioned during the interview, and in my mind, related to each other. During a second step, I read the transcript of each interview in form a printed hard copy and started initial coding on paper. The transcripts were not edited and all quotes presented in the following chapters are kept in their original form. Independently and in addition to reviewing the printed transcripts I wrote several memos for each interview with some excerpted quotes and associated meanings. Once I had completed what I consider a first »manual round of analysis« I then uploaded all transcripts into Dedoose to conduct initial coding in the software environment allowing for more in-depth connections between the complete data set. This allowed for a more thorough process to generate, review and modify codes, connect all datapoints

with each other, develop concepts, categories and subcategories. The data collection and data analysis took place in a continuous cycle throughout the research process until theoretical saturation emerged. Six main themes emerged from the data analysis and provided the basis for the development of a model that illustrates and describes key components involved in the development of creative literacy. The model will be explained in further detail in Chapter 5.

INDUCTIVE ANALYSIS

Throughout the analysis of the data, I followed an inductive approach and conducted a thematic analysis by asking questions, interpreting various meanings of words and sentences, developing themes, codes, concepts, and categories. Constant comparison was applied after the first interview and continued until the analysis of the last interview was completed. Conducting the interviews and analyzing the data was done over the course of five months and both, theoretical sampling and constant comparison were being applied throughout the process.

During the initial coding, I categorized each section of the data with a short name that »summarizes and accounts for each piece of data.«¹ As I paid close attention to the way I coded the data, I looked particularly for any meaning that the data held. While it was impossible for me to forget my professional background, my teaching experience and my subject knowledge that spans over 30 years, I made sure to review the data without any »preconceived concepts in mind«² and to experience the data with an open mind allowing the data to speak for itself while being aware of new connections that developed along the way.

During the initial coding, I applied word-by-word coding, line-by-line coding and in vivo codes, and then looked at specific incidents the codes

1 Charmaz, Kathy. *Constructing Grounded Theory*. 2nd edition. Introducing Qualitative Methods. London; Thousand Oaks, Calif: Sage, 2014.

2 Charmaz, Kathy. *Constructing Grounded Theory*. 2nd edition. Introducing Qualitative Methods. London; Thousand Oaks, Calif: Sage, 2014 (page 121).

might represent. The codes were transferred into a mind map to represent that data visually. This helped identify hierarchies and structures as well as relationships.

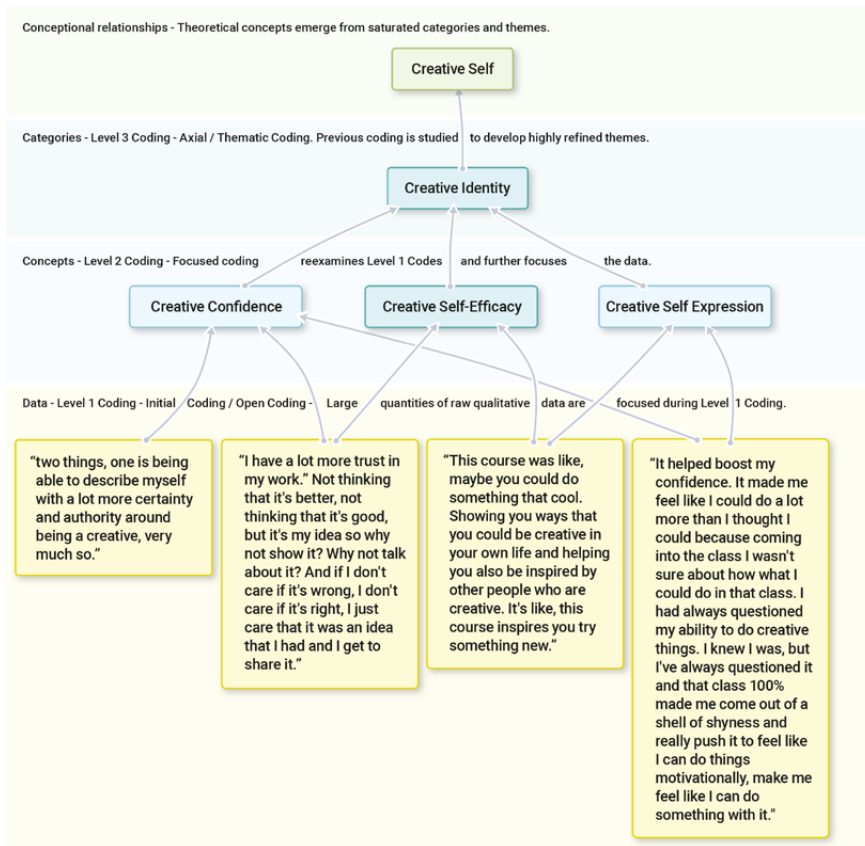


Figure 4-1. Inductive data analysis in grounded theory (adopted from Hahn)³

³ Hahn, Christopher. *Doing Qualitative Research Using Your Computer: A Practical Guide*. Los Angeles; London: SAGE, 2008.

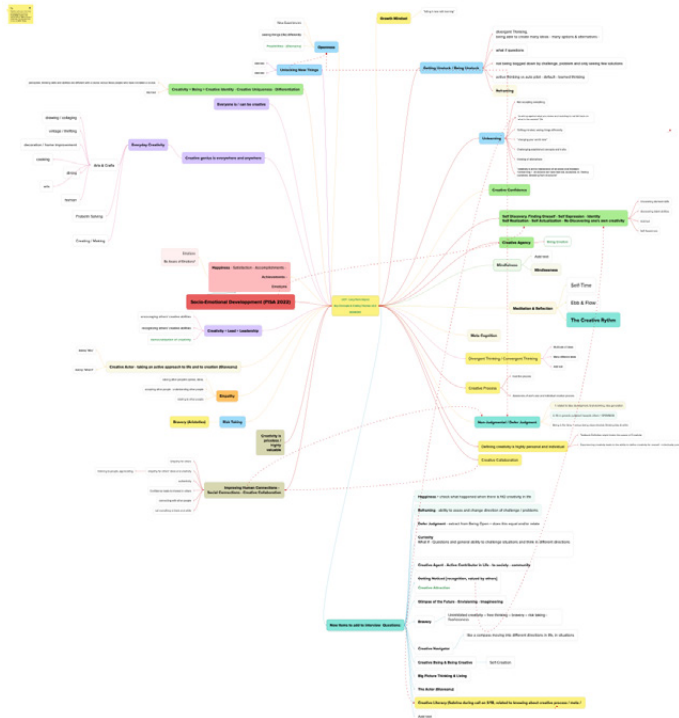


Figure 4-2. Early stage of initial coding phase (An enlarged version of this figure can be reviewed in Appendix 5.)

Strauss and Corbin suggest that »illustrative diagrams can focus the researcher toward theoretical explanations of the phenomenon under study.«⁴ I used illustrative diagrams to explain and visualize patterns throughout the coding process and particularly to identify patterns that emerged during the axial coding.⁵ This allowed me to recognize relationships among the categories.

4 Strauss, Anselm, and Juliet Corbin. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*, 2nd Ed. Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory, 2nd Ed. Thousand Oaks, CA, US: Sage Publications, Inc, 1998.

5 Scott, Karen Wilson, and Dana Howell. »Clarifying Analysis and Interpretation in Grounded Theory: Using a Conditional Relationship Guide and Reflective Coding Matrix.« *International Journal of Qualitative Methods* 7, no. 2 (June 2008): 1–15. <https://doi.org/10.1177/160940690800700201>.



Figure 4-3. Mid stage of initial coding and development of categories and subcategories (An enlarged version of this figure can be reviewed in Appendix 5.)

Constant comparison and reflection, as well as identifying any missing links between the codes and what they represented, while reflecting on what participants shared during the interviews, allowed me to develop and clarify the codes, and let me move forward and apply more focused coding. This approach allowed for the emergence of concepts, categories and subcategories from the data. The analysis and coding of the transcripts was repeated at least five times and during that interactive process of coding and recoding, the development of categories and subcategories changed multiple times until six major themes emerged from the data. The enclosed images of the visual representation of the coding process illustrate the shift occurring between generating initial codes, reviewing and modifying those codes.

In the next phase, I applied axial coding to identify any relationships between categories and subcategories. Charmaz states that »axial coding relates categories to subcategories, specifies the properties and dimensions of a category, and reassembles the data you have fractured during initial coding to give coherence to the emerging analysis.« This provided me with a systematic way to clarify and identify the emerging themes and to move forward in the analysis and look for any theoretical categories that might be associated with the codes.

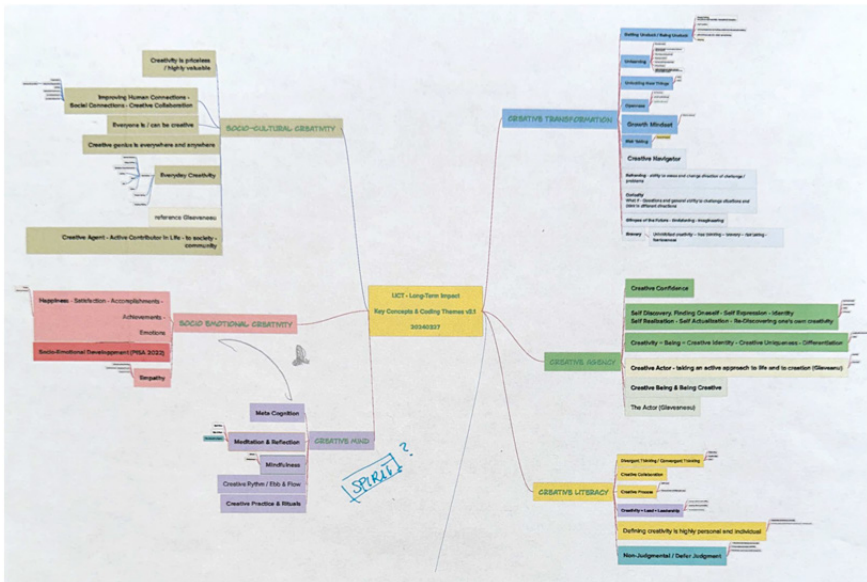


Figure 4-4. Mid stage of initial coding and development of categories and subcategories related to six main themes

Next, I reviewed and checked all substantive codes for any possible hypotheses that could emerge into a theory. My professional knowledge at that point was helpful as I was aware of several theories that have been developed by other creativity researchers. This allowed me to recognize specific categories and themes that emerged from the data and at the same time, notice that they have not been represented in existing theoretical models.

Through the application of a systematic approach during the collection and analysis of the qualitative data, six themes emerged as main concepts and then laid the foundation for the theoretical framework through

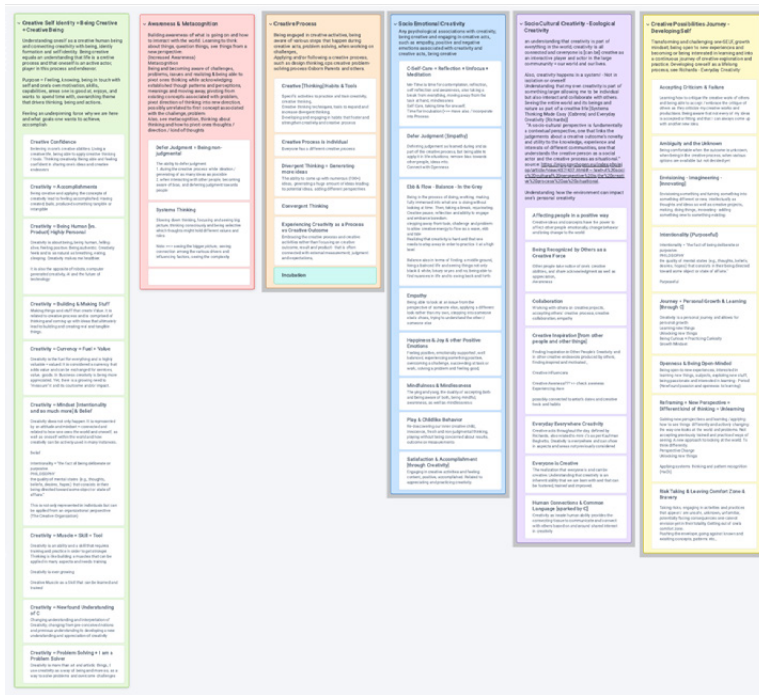


Figure 4-6. Emergence of six main themes with corresponding codes through axial and theoretical coding (An enlarged version of this figure can be reviewed in Appendix 5.)

ted into hypotheses make up the body of the generated grounded theory with theoretical completeness.»⁸

Although saturation started at that point, I continued interviewing, reviewed previous memos and wrote new ones, examined reflection notes on my own teaching, studied new literature and attended two academic conferences to apply a greater focus on my theoretical categories. As the properties of my theoretical categories started to saturate through the data, it became clear that no new categories and new properties were to be found, and I started to explore the emerging theories in visual diagrams by drawing connections and relationships as they appear and interrelate with each other based on time, space, environment, the individual, the collective and various other factors.

8 Charmaz, Kathy. (2014-03-19). *Constructing Grounded Theory*, 2nd Edition. [VitalSource Bookshelf 10.4.1]. Retrieved from vbk://9781446293492 (page 213).

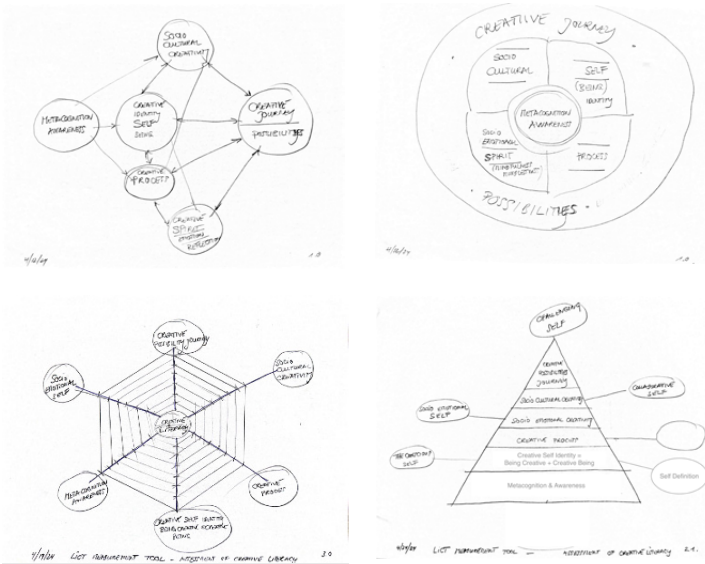


Figure 4-7. Development of visual models of the six main themes illustrating their relationships from multiple perspectives

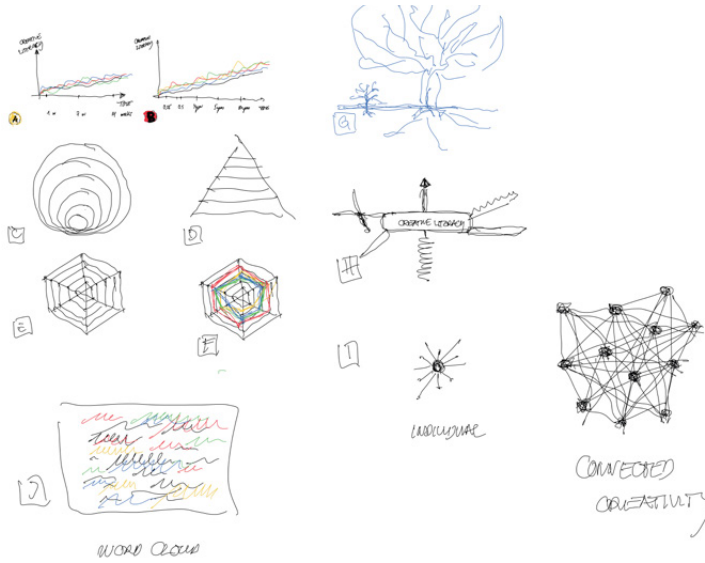


Figure 4-8. Development of visual models representing the six main themes illustrating various relationships while addressing the complexity of a system from different perspectives

The emerging themes and their relationship with each other will be discussed in the next Chapter Five: Findings. As constructivist grounded theory emphasizes process and meaning while embracing different concepts from various perspectives and origin, the findings will be presented in detail and will include rich descriptions by presenting direct quotes of participants.

CHAPTER FIVE: KEY FINDINGS

The study investigated the process that takes place when human subjects [former students] experience the subject creativity during a 14-week long college course that teaches creativity, creative thinking, creative process and exposes subjects to the wide field of creativity. The study focused on what students experienced during the course and explored any potential long-term impact or implications post-graduation, years after a course had been taken.

All participants confirmed that they remember the creativity course very well, and that the course made an impact and that the experience provided a lasting impression.

The data analysis from the interviews revealed that all participants remembered and referenced something that took place at the beginning of the course when they were asked on the first day of classes if they considered themselves creative or not. This self-classification was reiterated by all participants and the data analysis confirmed that they had identified themselves at the outset of the course into the following two categories:

1. 15 participants (50%) believed they were creative before starting the course, but only within the context and understanding that they are creative in an artistic sense, such as painting, taking photos, playing music or performing in theater, associated with the arts in general.
2. 15 participants (50%) did not identify themselves as creative, expressed that they were not artistic and did not engage in any artistic endeavors.

THE OVERALL COURSE IMPACT

Participants' reflections about their overall course experience.

When asked about an overall impression and how they remember the course, participants stated that they still have vivid memories of the course many years after the course completion and that the course had an impact

on how participants continued their creative journey after the course. Additionally, participants described how the lessons learned and the experience from the course impacted their personal and professional lives. The course format and pedagogical design emerged as a theme during the data analysis as participants stated that they appreciated the different, although unusual and challenging course design. The fact that new concepts were being exposed and that established beliefs were being challenged during the course were additional topics that were connected with the overall course experience. »Being pushed« to explore personal aspects of themselves and their lives outside the classroom emerged as a theme.

One of the salient themes that emerged from the interviews, is the fact that the conversation about the course experience, the actual interview itself, provided the participants with the opportunity to reflect on what has happened since the course, and that they became even more aware of how the course has affected them in their personal and professional lives. Participants offered the following insights and provided individual comments about how the course is being remembered, and they described its lasting impact. The numbers after the names (in parenthesis) represent the time since the participants completed the course.

Alice (3-4 years): »I couldn't tell you literally about any other course, maybe my economics course because that was kind of different. But I do find myself thinking about this [creativity] course and kind of using it as a way to reset almost and be like, you are a creative person. You can do things creatively; you can think creatively. And so, I would say that's a positive impact.«

Ken (3-4 years): »It has actually become a part of my life, the creative process and the creative thinking practices. It had become a part of my life without even me forcing myself to go through those steps. It's now kind of a second nature to pause and think about what I'm doing. So, it has impacted my life significantly, and I really wish that more people go through the same kind of, I don't know if people are going to take the course or take a training and have the same epiphany moment like I did, but I wish more people will go through that moment of epiphany. I think it'll change a lot.«

Adam (9-10 Years): »So, I think that each assignment was really, really well thought through and still so memorable. So, a hugely impactful class. I think it's a huge opportunity for people to find themselves to really learn what creativity is because they're going to use it a hundred percent. This is something that you are 110% going to use whether you decide to work, you want to be a homemaker, whether you do advertising, whether you do finance, you're going to use this in life, period. And I think it's a great idea to have this class and it's literally life changing if I can add that.«

Xiaomin (1-2 years): »Well, I just feel very thankful about your course and also thank to myself to make the decision to take your course, because I think it's really changed my life and also changed my perspective to myself because I think I'm not that confident at first, but now I think I'm become more and more confident to show my own ideas and tell people my perspective so I can become a creative person that everybody can see it.«

Darika (7-8 years): »I think that having that course helped me kind of end up where I have, but then also the idea of internalizing artist's dates and seeing more of the world. There's just more value in that than any career growth because you're seeing more of culture or art, entertainment, even as simple as seeing a movie you wouldn't normally see can open up your mind and anything that breaks you outside of your comfort zone is a good thing in my opinion.«

Anna (5-6 years): »I would say that I did not see myself as a creative person before taking your course. Then afterwards I found myself pursuing more creative avenues, even if I wasn't still labeled that way in my professional life. I think you brought a lot of essence of creativity into my personal and professional life, and it got me to where I am.«

The above-mentioned comments demonstrate that the creativity course made an overall impact and that participants perceived significant positive associations, outcomes and changes. Independently of the time that passed since having completed the course, as little as one year and as long as 10 years, at the core, all participants' comments were similar. Independently of the

personal and professional circumstances of each participant all participants clearly associated the creativity course with having learned important and valuable lessons that can have a long-term impact.

In the next section, several themes that emerged will be explored that describe and illustrate participants' personal journey they experienced during the 14-week long course.

The above statements support findings from a recent study about the short-term impact of creative pedagogy and support the notion that creativity can be taught and that creativity training can help humans personally and professionally.¹

EMERGING THEMES

While all participants mentioned specific learnings, they shared that they experienced an overarching change and a clear eye-opening understanding after the course, confirming that some kind of transformation between the first and last class took place. Throughout the course, existing concepts were being challenged and something was being unlearned. The participants additionally pointed out that creativity is a complex topic and that creativity shows up in many different facets and can have implications in their personal lives as much as in their professional environments.

While all participants correlated the course experience and the key takeaways to some positive development and changes that have occurred in their lives since completing the course, several key themes emerged during the data analysis.

Previously held concepts were being challenged because of a newfound reality, a new-found truth related to creativity that was manifested by a new understanding of what creativity means and how creativity can be understood. All participants revealed during the interview that prior to taking the creativity course, their understanding about creativity was grounded in the

1 Habib, Sabrina, Thomas Vogel and Evelyn Thorne. »Transformational Creative Pedagogy in the Age of AI: A Multiyear Qualitative Analysis Across Universities.« Presentation at The South Oregon University 2024 Annual Creativity Conference, Ashland, OR, May 2024.

KEY THEMES	DESCRIPTION
Creativity is more than the Arts	Creativity is not tied to the arts and happens every day. Creativity is self-expression, thinking and problem-solving.
Unlearning	Ability to recognize and challenge preconceived notions, understandings, concepts and knowledge. Being willing to see everything in a new light and from a new perspective. Being able to question and challenge existing concepts and accept new truths and data points.
Transformational Journey	Transforming and challenging one-self, being open to new experiences and becoming or being interested in learning and a continuous journey of creative exploration and practice. Developing oneself as a and during a lifelong process
Awareness, Metacognition, Consciousness	Building awareness of how to interact with the world. Thinking about one's own thinking and thought processes. Thinking about things.
Creative Confidence, Self-Efficacy	Believing in one's creative abilities. Living a creative life, being able to apply creative thinking / tools. Thinking creatively. Being able and feeling confident in sharing one's ideas and creative endeavors.
Creative Self-Identity	Understanding oneself as a creative human being and connecting creativity with being, identity formation and self-identity. Being creative equals an understanding that life is a creative process and that oneself is an active actor, player in this process and endeavor.
Creativity is Individual	Creativity as a „boundless journey of self-expression and self-realization«. Creativity is making, doing, building and being = a creative act that allows one to express herself. Self-Discovery leading to and providing foundation for creative [possibilities] journey.
Creativity lies in Everyone	The realization that everyone is and can be creative. Understanding that creativity is an inherent ability that we are born with and that can be fostered, trained and improved.
The Creative Process	Being engaged in creative activities, being aware of various steps that happen during creative productions, problem solving, when working on challenges. Applying and/or following a creative process, such as design thinking, cps creative problem-solving process Osborn Parnes and others.
Divergent Thinking	The ability to come up with numerous (100+) ideas, generating a huge number of ideas leading to potential ideas, adding different perspectives.

Self-Awareness & Balance	Being aware of one's own actions, being and thoughts. Then, taking a break, rejuvenating. Creative pause, reflection and ability to engage and embrace boredom. Stepping away from task, challenge and problem to allow creative energy to flow as a wave, ebb and tide. Realizing that creativity is hard and that one needs to step away in order to practice it at a high level.
Creativity is a Muscle	Creativity is an ability and a skill that requires training and practice in order to get stronger. Thinking is like building a muscle that can be applied in many aspects and needs training. Creativity is ever growing. Creative Muscle as a Skill that can be learned and trained.
Emotions	Any psychological associations with creativity, being creative and engaging in creative acts, such as empathy, positive and negative emotions associated with creativity and creative acts. Feeling positive, emotionally supported, well balanced, experiencing something positive, overcoming a challenge, succeeding at task or work, solving a problem and feeling good while doing so. Flow state of mind.
Openness, Open-Mindedness	Being open to new experiences, interested in learning new things, subjects, exploring new stuff, being passionate and interested in learning.
Creativity is Everywhere	Creative acts throughout the day. Creativity is everywhere and can show up in aspects and areas not previously considered.
Human Connections	Creativity as innate human ability that provides the connecting tissue to communicate and connect with others based on and around shared interest in creativity.
Getting Noticed	Creativity acts as an agent that is attractive. One's creativity attracts others and one is attracted by others' creativity.
Personal Growth & Learning	Creativity is a personal journey and allows for personal growth. Learning new things. Unlocking new things. Being Curious + Practicing Curiosity. Growth Mindset.

Table 5-1. Key Themes that emerged from the Data Analysis

belief that creativity is only associated with art, artists and the arts. Reflecting back on the course experience, the participants pointed out that a shift had taken place, leading to a revised and new understanding of what creativity stands for, how it can manifest itself and how complex it can appear in so many more ways than previously understood.

CREATIVITY IS MORE THAN THE ARTS

The majority of participants mentioned the newly gained understanding that creativity is no longer tied to the arts or being an artist. Anna (5-6 years) expressed this shift in perception when she said

»I think before the course I thought of creativity as a gift that people are either born creative or not. And when I thought of creativity, I associated it a lot with artists or singers, socially regarded as creative people like painters, actors and never with software engineers. I never thought of those as creative people even though some of the biggest innovations or invention of the time was by those more technical people.«

This change from associating creativity with being artistic and the arts also shows up in Hunter's statement:

»I remember from the prior classes we'd kind of started to dive into creativity outside of art, but I don't know who said it. Somebody said that creativity didn't have to be artistic. And I really thought about that while we were sitting there and I really thought, what could that mean? And then I started thinking about my friends who didn't go into artistic careers, and I started thinking about my partner who no one would have at the time viewed as inherently creative, but he is. I mean, it's the same partner now four years later, and he's a very creative person. But I thought about it and I think my answer kind of changed in an instant. I saw that on a grander scale' there's some creativity in everyone. There's something unique and special in the way that everyone thinks and moves about the world.«

Another example of this newfound and expanded understanding of creativity is expressed in the following statement by Stacey (7-8 years) when she said

»I think I knew my creativity before the course. I was always a writer, so I took creative writing classes. I mean, I've always been musical. I play many instruments. I speak many languages. So, I kind of looked at creativity in terms of creative skillset and less so in terms of, again, that professional approach to creativity. If you were to tell me what is a professional creative, I would've told you, oh, well, a violinist or an artist or I wouldn't necessarily have said, oh, a branding executive, which is what you could technically call me. So, I think that my definition of creativity was much more art-based beforehand.«

UNLEARNING

Many participants associated their course experience with the fact that their »bubble was being burst.« The course represents to a certain degree, a disruption of their beliefs and perceptions they had about creativity and themselves. Their understanding of the world, their decision-making process and their inner selves was getting punctured and the course provided most participants with a change moment. All participants spoke of this transformative experience in terms of feeling an 'epiphany', a »spark«, something »eye opening« and a major »unlearning« of previously held beliefs and concepts. According to Hislop et al. »unlearning has been very broadly defined as abandoning or giving up knowledge, ideas or behaviours« and is associated with learning.² As humans are giving up previously learned concepts about others as well as themselves, a space and opportunity for new learning emerges.³ The course acted as a catalyst and allowed students to consider alternative perspectives and opinions related to previously generated knowledge and behavior. Manuel (9-10 years) mentioned »I remember the course being really eye-opening in terms of how you can apply creativity beyond the arts and the artistic field.«

Andrew (1–2 years) pointed out

2 Hislop, Donald, Bosley, S., Coombs, C. R., & Holland, J. (2014). The process of individual unlearning: A neglected topic in an under-researched field. *Management Learning*, 45 (5), 540–560. <https://doi.org/10.1177/1350507613486423>.

3 Coombs, Crispin, Hislop, D., Holland, J., Bosley, S., & Manful, E. (2013). Exploring types of individual unlearning by local health-care managers: An original empirical approach. *Health Services and Delivery Research*, 1(2), 1–126. <https://doi.org/10.3310/hsdr01020>

»I did not see myself as a creative person before taking your course. Then afterwards I found myself pursuing more creative avenues, even if I wasn't still labeled that way in my professional life.«

The participants expressed that after the 14-week course they had a new understanding of creativity, and how they identified themselves, paired and accompanied, with a new confidence in their own creative abilities and associated beliefs.

The course acted as a catalyst that provided the spark for embarking in the creative process and a previously unknown form of creative thinking. Enabling participants to change and adjust how they understood creativity prior to the course allowed for the creative process to emerge and to be understood in a new way. The creative process itself became untangled from the end result, and creativity was no longer focused only on the end product, which the participants had thought before. Creativity became a process in itself. It became a journey. It became everyone's journey. Creativity became part of life, and creativity turned out to be fuel and energy for their life journey.

All participants, who partook in the study, mentioned that the course provided them with the opportunity and freedom to challenge these preconceived notions and to go further, to become aware of their own thinking, their process, their creative thinking abilities, but also correlated that a desire, hunger and openness, a willingness to push, to learn, to realize that there is more in life compared to what they have understood and felt beforehand, had been unleashed.

Sonya (1-2 years) spoke of her newly gained understanding of creativity after the course by saying

»And that's something that I didn't necessarily know before taking that class. So, I feel like I knew the basic definition of it and I had some ideas of what it meant and what it entailed to be someone creative. But I also didn't know, first of all how to exercise creativeness and how to really bring the skill up. And then I also didn't know that I don't know if the word is no, but I didn't really think about how you could apply creativeness in so many different ways.«

This unlearning, mental spark, epiphany and shift in thinking can be interpreted as the ability to distinguish between the pragmatic, representing the participants' beliefs held prior to the course and how their belief system changed throughout the course. All participants articulated that until the start of the course they, including their personal and professional lives, their beliefs and experiences had been framed by the education, parenting and socialization they had been exposed to previously, which provided the foundation for their world view and their decision-making processes. All information humans are exposed to allows us to reference the stored information and to apply it for future uses. All experiences we go through influence and constrain how we move through life and can be seen as practical.⁴

While those previously held concepts are important for humans to be able to live their lives, throughout the course, these previously held concepts, preconceived notions and pragmatism of almost all participants were being challenged and an alteration from the pragmatic towards the possible occurred. The possible represents something that has not yet happened, but can be envisioned through imagination and thought. Once something has been framed, it appears to be pragmatic and probable, considered a pre-determined concept, and is no longer free. The idea of possibility is tied to the understanding that being is important and that as we are in the state of being, we can think beyond the pre-existing concepts, beliefs and frameworks that help us navigate our lives independently of what others might expect of us.⁵ Thinking in terms of possibility and being able to envision the possible, allows us to look within and to go further and truly discover our self.

Darika (7-8 years) mentioned the term 'unlearning' that took place for her during the course as she explains

»I think the biggest takeaway of that course was going back to the roots for me. And it is an idea of the whole idea of unlearning what we've learned. We spent so many years building these layers and layers of walls of judgment and self-doubt and all of that. I think the biggest takeaway if you

4 Guignon, Charles B. (2006). *The Cambridge Companion to Heidegger* (Cambridge Companions to Philosophy), 11. Heidegger, Buddhism, and deep ecology. [Kindle iOS version]. Retrieved from Amazon.com.

5 Glăveanu, Vlad P. (2021). *The Possible: A Sociocultural Theory*, Oxford University Press, <https://a.co/8FJ9h96>.

ask me, and the first thing that I think of when I think of that course was to just remove all of that extra stuff and go back to or go inward because that's where the best ideas were.»

The topic »unlearning« was also a main theme in Hunter's comment:

»The biggest takeaway is unlearning your habits, unlearning the things that have just been so driven into you by society and learning that it's okay to step outside the box, think of the bigger picture, move forward in a way that are authentic to yourself. And I would say that without creativity, the world would be a pretty boring place. And so, I wish more people could realize that creative potential is not just artistic. It's not just something that only a select amount of people have. It's something that you have to foster and you have to want it. You have to want to express your creativity and learn where your creativity lies.«

Anna (5-6 years) illustrated her transformation by acknowledging a major shift in her thinking and her transformational experience by saying

»I think the best way to describe the creativity course to me is a moment of epiphany. So, one thing that stood out to me a lot from the course and it still sticks with me ever since is the shift in thinking from creativity as an occurrence. That creativity just happens toward creativity as a skill or creative thinking as a skill that you can develop and you can be aware of the development.«

Denise (7-8 years) illustrated her shift in thinking by saying

»Yeah, so back to the starting the course and how I viewed creativity or creative people versus non-creative, it was kind of like I saw it as creative people were these colorful fluid people, were able to be the artists of the world. And then you have the people that are not so creative and that those are the people that I would associate with the spreadsheets and the

very buttoned up and kind of traditional and the people that were the black and white. And it was sort of like that divide. So even in my thinking, that thinking was sort of black and white, even though I was like, oh, I'm part of the colorful group. But then understanding that we're all creative and it shows up in different ways.»

The rekindling of a spark is expressed by Claire (5-6 years) who mentioned

»And that class was all about finding non-traditional routes to be creative and thinking outside the box to solve problems and not doing things how you normally do it, just completely get out of your routine and yeah, just solve the problem, be creative. That class was super helpful in allowing there to be an open conversation on creativity, which was so helpful for me is someone who maybe considers themselves creative as a child, but to rehash that spark inside of me.»

Sadie (5-6 years) summarized her overall impression of the class by saying

»I definitely appreciated the class and appreciated the new found view of what creativity is, the scholarly take on creativity and understanding that it is much deeper than we think.»

Kavya (1-2 years) pointed out the fact that the course changed her overall perspective and that it inspired her to ask questions, as she offers the following comment:

»I changed my whole perspective on what truly is creative. Now, I actually look at things in a much different way, in a much clearer way. And I actually study, okay, why did they make this? Why did they do this? How is this influencing people? Things like that. So, I think in that way, yes, it has made a pretty big impact.»

Transformational Journey | The above statements demonstrate a clear change and transformational learning experience taking place during and after the 14-week creativity course that provides the foundation for a long-term transformational journey. The learning experience can be described by three emerging shifts of perception related to what creativity meant for participants before the course and how it has been perceived after the course.

All participants confirmed that creativity, after having learned and being exposed to during the course, offers something that relates to everything in life. This means that creativity after the course experience is related to finding some new recipes, making food, finding a new way from home to work or to class, and that creativity shows up in everyone and everywhere.

Those participants who believed to be creative at the very beginning, or who remembered that they were creative during childhood and might have lost it, learned and acknowledged that they thought of themselves as creatives only within the context of art and artistic endeavors. After the course, they knew and understood that they can be creative in many aspects of life, artistic and non-artistic, problem-solving, thinking of alternative ways to do everything and anything.

The second group of participants, who identified themselves as not being creative, actually dismantled their initial belief. Participants reflected and reported that after the course, they experienced a newfound confidence in their own creativity. They realized, again, a new concept, a new epiphany, that they can be creative as well. This is the beginning of a journey of self and a journey of creativity that will be explored further in this chapter.

AWARENESS, METACOGNITION, CONSCIOUSNESS

All participants mentioned that their new understanding of what creativity meant also included a mental shift, an increased awareness and a newfound perception that took place throughout the course. Participants stated that the way they think had changed and that they became more aware of their thought processes as well as their decision-making processes. This can be summarized as an increased metacognition, awareness, self-awareness and mindfulness, topics that will be further described below. All participants pointed out that before the course they were not aware and did not understand these

mental processes and that the »eye-opening«, »epiphany-like« experience lead to a major shift in the way they thought by the end of the course, resulting in the ability to be aware of their thinking and how their thinking can change and be adjusted.

CREATIVE CONFIDENCE, CREATIVE SELF-EFFICACY AND CREATIVE SELF-IDENTITY

This increased awareness and newly experienced metacognition paired with successful creative achievements produced during the course lead to an increased self-efficacy, creative confidence, but also formulating a self-belief that can be interpreted as creative self-identity.

An example of redefining their own creativity and their creative self before and after the course is represented by Jason (5-6 years) said:

»The biggest takeaways that I got from the course were not only about creativity, but self-confidence to use the innate creativity that you would express regularly, that we would always have. Everybody is creative. And that was one of the biggest takeaways I got from the course is that everybody is creative. And that completely changed the scope of how I view myself and creativity in general.«

Darika (7-8 years) revealed her »cathartic experience« by saying

»I think that class was my favorite class. I enjoyed every bit of it. It was a very cathartic experience for me. I think there are very few classes that you say can actually increase your confidence, but I can say this without a doubt that the class on creativity changed my opinion about myself and it made me a lot more confident. And it's very hard to really look back and say this was the point where my confidence grew. But I think with this class I could see a very clear difference. It was a very clear before and after.«

This process is paired with an overall increased awareness and understanding of what is going on in the participants' thought processes as well as their lives. The majority of participants mentioned an ability to shift their awareness and being able to focus their thinking on inwardly as well as outwardly aspects, observing the external world and becoming open paired with the ability to focus on inner thoughts and feelings.

In addition to developing a newfound understanding of what creativity means and how complex creativity can manifest itself, all participants realized a more personal dimension that appears in a newly found or strengthened belief that they have creative abilities leading to an increased creative confidence associated with an increased creative self-efficacy,⁶ and that this confidence provides them with a greater freedom to complete creative tasks, as well as think and be who they want to be instead of what they think they are supposed to be.

CREATIVITY IS INDIVIDUAL AND CREATIVITY LIES IN EVERYONE

The data analysis revealed that all participants realized during the course that creativity is associated with being uniquely individual and that creativity happens at the individual level. The individual experience that students go through allows them to realize that creativity is an element and a building block that can be used to define themselves to be different if they want to be different in any environment, and also to produce different results compared to what might be expected of them or what the world believes they should be doing.

The realization that creativity lies in everyone and that everyone has creative abilities is another theme that emerged from the data analysis. Participants attributed this realization back to course when they went through some exercises that had very specific prompts and seeing how each member of the class interpreted those prompts in hugely different ways. This allowed the participants to learn that creativity actually happens in many different ways, as every student had to work on one and the same assignment. The result was

6 Beghetto, Ronald, and Maciej Karwowski. »Toward Untangling Creative Self-Beliefs.« In *The Creative Self: Effect of Beliefs, Self-Efficacy, Mindset, and Identity*. Edited by Karwowski, Maciej, and James C. Kaufman. Boston, MA: Elsevier, 2017.

that everyone saw that the one assignment could be interpreted from different perspectives and solved in numerous and different ways. The countless iterations and the way everyone came up with their solutions surprised the members of the class. Participants mentioned that they were astonished by the multitude of ideas and creativity happening around them and that all was triggered by exactly the same one assignment.

Hunter (3-4 years) mentioned that she was surprised to see so many different iterations and solutions to the divergent thinking exercise where everyone had to add shapes, images, pictograms to 15 empty circles as she pointed out

»The exercise that had the biggest impact might be so small, but it was the circle prompt where we have to draw with the circles. I think there were like nine or 12 and you just told us that we could draw anything we wanted. It just had to be including the circle and all the different things people came up with were just so incredibly creative and different in different ways.«

While creativity is individual and tied to each human being, creativity can show up differently based on one's personal and professional situation at any given time, and creativity can happen in any circumstance and in any environment anywhere. This applied creativity is always in flux and can take on many different shapes and be expressed differently based on the place, the time of where one is and how one feels in any given moment.

Although the course exposed every participant to a number of established definitions of creativity, such as that creativity relates to divergent and convergent thinking, to the creation of something novel and useful, that creativity is related to motivation and creative thinking skills, and that creativity can be practiced in different domains,⁷ every participant defined creativity in a different way, and the emerging data confirms that their individual understanding of creativity is highly personal.

Participants realized that everyone, every human being has this creative capability and that they witnessed creative abilities during the course. Par-

7 Bronson, Po, and Ashley Merryman. »The Creativity Crisis.« *Newsweek Magazine*, July 10, 2010. <https://www.newsweek.com/creativity-crisis-74665>.

ticipants saw evidence of everyone's creativity in their classmates, which was articulated as an eye-opening experience. Participants then realized that this creativity lies within oneself and that creativity is about putting ourselves onto the stage and putting ourselves onto the stage independently of expectations and what we've been taught.

The realization that everyone possesses innate creative abilities that require practice and training, led to a freeing experience and the unleashing of new energies that can be beneficial at the individualistic as well as at a group level. Participants reported that once they understood that everyone has it, the creativity became merged with being oneself, being, to a certain degree truthful, being authentic to oneself, to finding, developing and building the true authentic self, independently of expectations that society, partners, colleagues, bosses and others might have. Karwowski and Kaufman discuss authenticity and the »inner self« as a function of our personal identities.⁸

Yes, we always have to navigate and negotiate our independence but the freedom that comes with understanding one's true creative capabilities allows for a more independent way of living, choosing and developing or making our rules by ourselves instead of living our lives we feel others expect it from us. Hunter (3-4 years) described how she discovered during the course that everyone is different and that that realization allowed her to look inside and recognize that she can give herself permission to be individual, different and ultimately true to herself as she stated

»I've learned that not everyone thinks the same way. It's made me just appreciate that everyone's different, which has led to a lot of empathy and kindness and it's allowed me to not be, like I said, a perfectionist, not feel like I have to live up to the crazy standards or expectations that others have for me, I'm allowed to navigate the world in a way that's authentic to me.«

Participants shared their insight that creativity ultimately is about being different. Being different in any way and using creativity in order to achieve any

8 Dollinger, Stephen J., and Stephanie Clancy Dollinger. »Creativity and Identity.« In *The Creative Self: Effect of Beliefs, Self-Efficacy, Mindset, and Identity*, edited by Karwowski, Maciej; Kaufman, James C. (2017), (Explorations in Creativity Research) (pp. 49–64). Elsevier Science. Kindle Edition.

distinctiveness they want was practiced and experienced throughout the course and all participants shared that creativity was very closely tied to their identity. The identity is grounded in a self-belief that relates to self-efficacy and creative confidence, which as a combination of creative self-belief, creative confidence and self-awareness are coming together to form a strong self-identity. The data analysis revealed an increased or newly gained belief in oneself, self-creation and being creative while being an authentic human being. This new understanding of themselves as creative beings then lead to a creative self-identity. Several participants mentioned this perspective which I interpreted as a mathematical equation:

$$\text{Being Creative} + \text{Creative [Human] Being} = \text{Creative Self-Identity}$$

Manuel (9-10 years) illustrated this equation by stating

»I am a creative [human] being and I use a powerful tool and anything is possible«.

THE CREATIVE PROCESS AND DIVERGENT THINKING

Participants also shared that they understood during the course that creativity is not only tied to the end result or the creative product, but that creativity appears as a process. This realization provided the participants with the freedom to shift any focus from the end goal of creative endeavors and to focus on, enjoy and appreciate creativity as a process. Particularly, the conscious exploration of the creative process with its distinct separation of divergent thinking and converging thinking, the production of many ideas and having many options before deciding on a final solution were mentioned.

Another theme that emerged is the incubation phase, a time during which one has to step away from the problem, allowing the unconscious mind to intermingle with external influences, such as taking a break, pausing, staying with a challenge and multiple potential solutions for some time and letting those thoughts simmer before applying convergent thinking and

making a conscious decision about which idea might be best suited to meet the challenge in the best possible outcome for everything and everyone involved. Participants learned throughout the course how the decision-making process actually takes place during numerous phases of the creative process. This newly gained awareness includes the fact that the creative process is being experienced at a very individual level.

The majority of participants mentioned various forms of creative thinking processes and that the process typically includes several steps, such as ideation, which they called »idea dump«, »brain dump«, »just jotting things down without evaluating them«, including deferring of judgment. Deferring of judgment is a big important component shared by all, and seeing the ability that one can come up with more than just the typical four or five ideas that they have come up with and would've come up with without the course or prior to the course.

While several participants remembered a specific creative process, they were exposed to during the course, such as Osborn Parnes Creative Problems Solving Process, Design Thinking, Amabile's 4 p model and Wallas' 4-Step Process as well as the 5 Stage Model of Creativity by James Webb Young, the majority of participants mentioned that they have developed and formed their own individual creative process. Applying a creative process in combination with self-awareness and metacognition requires some mental capacity and energy, and leads to an increased level of burning energy. Participants stated that creativity and applying the creative process can be hard work and that being creative over an extended time period can be exhausting. Jason (5-6 years) spoke about his creative process and that he thinks of many different options, restrictions and potential outcomes and the he does a lot of thinking when he develops new recipe as a hobby chef as he said

»Definitely the creative process. Something that is mentally exhausting. It's going to be hard. There's so many ways to be creative, there's so many limitations we can set on ourselves. So, to think that there is one good way to do it is completely erroneous in my opinion.«

Thinking about multiple options and evaluating those in order to achieve the best outcome requires mental energy and strength. Acknowledging and

realizing that creativity requires mental power and energy, all participants identified a remedy – the creative pause, stepping away from the problem and taking care of their inner calm. This notion of self-care was frequently expressed and associated with practicing mindfulness and meditation exercises and maintaining a balance between the ebb and flow. Participants appreciated that they do not have to force their creativity and that idea generation is not exclusively tied to brainstorming sessions as Denise (7-8 years) indicated

»A lot of times, I also will sleep on things. So again, the conversation I had in the coffee shop the other day, we talked and we talked and we talked and I was like, okay, I need to sleep on this. And I slept on this and I was driving, and it was just being, doing very simple things. Things will just come to me. After I was driving, an idea came to me, I had to pull over to write in my notes the thing that came up, or I was also in the shower and I had to tell Alexa to take a note for me because I was just like, oh, wait, this thing.«

SELF-AWARENESS & BALANCE

All participants mentioned that they became aware when others acknowledged and sometimes applauded their increased creative ability that did not exist before the course. The majority of participants revealed that while creativity is a way of being, creativity requires self-awareness and reflection, as well as down-time, nothingness, boredom, meditation and balance. Participants shared that the concept of mindlessness and mindfulness in connection with creativity helps them find and create balance in their lives. Manuel (9-10 years) shared that his »moments of pause« allowed him to become a more balanced person, something he very much values in himself, as he pointed out

»My balance, being able to be balanced. Yeah, measured in many ways, whether it's emotional intelligence and having balance and measure there, whether it's balance in terms of when to flex creativity versus more. I don't even know what the opposite of creativity would be, but more rigid or status quo way of doing things and having a good balance between that, knowing how to be more analytical. That would be just in general, just

having that kind of balance and being able to know when to apply the right skills to the right problems.»

Mark (9-10 years) explained that meditation is part of his self-care and that he maintains rituals for balance and to sustain his creative abilities, as he said

»I think most important thing is you have to have some type of balance and routine in your life that will unlock this other side of you to be creative when it's time.»

According to the participants' statements, the combination, relationship and interconnection of self-awareness, awareness, consciousness and metacognition allows the participants to assess themselves and their activities in real-time. The self-awareness allows participants to catch themselves during their creative process and realize that there is always an easy way based on what has been done in the past, and that the easy way is related to previously established norms that have been acquired during education, upbringing and cultural frameworks.

With creativity and their creative thinking skills, participants realized that the easy way is often a solution or a path that a client might expect, that parents expect, that partners, colleagues and bosses might expect. But to hold that expectation at bay and to challenge what is expected by others and to be self-aware of the fact that they have their own free will to go further, to seek alternative routes, to look for different ways based on their personal interests in options and possibilities, exploring those is a true example of applying creativity and living a creative life.

Being self-aware and aware of what are established and accepted concepts and being able to envision something else by taking concepts and ideas further, possibly leading to riskier outcomes, is a mental process and ability that allows one to generate alternative ideas. This phase is then being followed by exploring those unusual and potentially challenging ideas before lastly, being willing to execute on those sometimes-crazier and more difficult ideas and bringing those to life.

Participants also explained that they became aware of the fact that creativity holds value as their individual creativity and creative productions they demonstrated during the course resulted in getting noticed, being heard and seen, and resulted in receiving positive feedback from their peers.

CREATIVITY IS A MUSCLE

Participants mentioned that they recognized creativity as a skill, a muscle and a tool that requires practice, continued training similar to building and maintaining physical athleticism or like practicing and developing the skill to play a musical instrument. The continued practice and improvement of creativity and creative thinking most likely will lead to improvements and growth as one builds creative competency and creative literacy. Possibly, and if practiced over an extended period or a lifetime of continuous practice, one might even be able to achieve some level of mastery of creativity. Participants associated this with a continued lifelong journey of possibilities while building up the self.

Participants also revealed that creativity has an effect on other people. As one demonstrates creativity, creative thinking and creative energy, people start taking notice. Additionally, the majority of participants mentioned that since the course, they now teach, encourage or enhance the creativity of others. It might be the five-year-old son of one participant. It might be volunteer work of Vietnamese immigrant high school students that are being helped by a participant and are mentored and tutored in developing their own creative abilities. It might be identifying the creative processes of coworkers and helping those coworkers to truly find their own creative abilities. It might be an older participant mentioning that her children are being encouraged to pursue an education in a creative field as creative skills and creative literacy will be required in any field as more technology and artificial intelligence systems are being employed.

EMOTIONS

Emotions is another theme that emerged from the data analysis. All participants shared that they experience positive emotions when they engage in creative acts, thoughts and projects. Creative self-expression and creative accomplishments are known to foster positive feelings and have been associated as a way to build resilience and cope with anxiety and stress, as well as help deal with societal norms during adolescence.⁹

A majority of participants reflected and shared that being self-aware and mindful also allows them to gauge their emotions, and become more aware when they feel down or not as excited. Becoming more in tune with their own creative self allows them to not only get more in touch with their emotions, but to manage their emotions or to accept negative emotions when they show up. And they know that whenever they don't get involved in creative acts, they don't feel as good. Several participants mentioned, if they are not creative or do not engage in creative activities on a regular basis, which particularly happened during covid, they feel down, negative and in some cases, depressed.

OPENNESS & OPEN-MINDEDNESS

Openness and becoming more open to new experiences and the unknown and the ability to being comfortable with ambiguity are additional themes that have emerged from the data analysis. This increased openness in partnership with the strengthened and newly gained confidence leads to a willingness to take more risks, to push harder, to go into the space where unexpected things might be hidden. According to Farmer and Tierney, a positive correlation exists between increased creative self-efficacy and creative confidence and being more open and open-minded towards new experiences.¹⁰

9 Barbot, Baptiste, and Brianna Heuser. »Creativity and Identity Formation in Adolescence: A Developmental Perspective.« In *The Creative Self: Effect of Beliefs, Self-Efficacy, Mindset, and Identity*, 87–98. Explorations in Creativity Research. San Diego, CA, US: Elsevier Academic Press, 2017. <https://doi.org/10.1016/B978-0-12-809790-8.00005-4>.

10 Farmer, Steven M., and Pamela Tierney. Chapter 2 - »Considering Creative Self-Efficacy: Its Current State and Ideas for Future Inquiry.« In *The Creative Self: Effect of Beliefs, Self-Efficacy, Mindset, and Identity*, edited by Karwowski, Maciej; Kaufman, James C. (2017), (Explorations in Creativity Research) (pp. 22–46). Elsevier Science. Kindle Edition.

CREATIVITY IS EVERYWHERE

All participants shared that the increased awareness and metacognition gained throughout the course combined with an openness and open-mindedness to explore the world anew led to the fact that they noticed that creativity shows up around them in every step of their life. Recognizing that creativity can appear in so many different ways is also associated with the realization that creativity is not only applied in the arts and artistic endeavors.

Juan (7-8 years) expressed that the course allowed him to recognize that creativity can be applied in professional and personal situations and can be expressed by the clothes one wears, how one prepares a meal and how one interacts with other people. He stated

»The first question that that course posed to me was defining the different strands of creative application or creative as a whole in your life. There are things that you can do creatively as a human, you can do on a personal level, on a daily life, the clothes you wear, the clothes, how you feel, how you talk to people.«

Several older participants, who had completed the course five or more years prior to the interview, drew a comparison between creativity and the choices they make when they are packing their kids' lunch or when they collaborate with colleagues while managing teams and defining specific team goals.

Hana (7-8 years) summarized that the many frameworks and concepts she was exposed to during the creativity course led to her understanding that creativity is everywhere. She said

»All those concepts that creativity is everywhere, I really learned from the course. I realized we could use this creativity to any kind of situation.«

HUMAN CONNECTIONS AND GETTING NOTICED

The majority of participants pointed out that their creativity works as a connector. Associated with their empathy, openness and open-mindedness, the participants have become more appreciative and aware of their social interactions in personal and professional situations. Their increased interest in things and activities is being complemented by a greater interest in other people. The data analysis uncovered that on one side, human connections are being sought out by being curious and acknowledging that every person has creative capabilities and might have something interesting to offer. On the other side, participants expressed that their creative accomplishments receive positive feedback from other people. In professional settings, their creative accomplishments are being deemed original, novel and useful by colleagues, supervisors and/or clients and might help advance a business or marketing goal, increase sales or create positive impact among customers. In the personal realm, the positive recognition comes from friends, family members and acquaintances who might appreciate a novel dinner or birthday party design, or value a handmade gift that is crafted creatively and highly personal.

Emma (1-2 years) stated that

»It feels very good to be recognized for doing something that nobody else has ever done before. I like the feedback of knowing that my work touched somebody.«

PERSONAL GROWTH & LEARNING

All participants spoke about the fact that after the course, they have experienced an increased desire and interest to learn new things and subjects, as well as explore life and continue their personal creative development. At the personal level, creativity represents an individual journey that can last a lifetime and help develop personal growth into an old age when people remain

a curiosity and continue unlocking new things.¹¹ Continuous personal development was addressed by all participants and the data analysis revealed that those who participated in the course 5-10 years ago prior to the interview described themselves as still being hungry to grow further and mentioned that their journey of personal growth is still ongoing. Younger participants pointed out that they see many opportunities to continue the creative journey they began during the course and continue that path for a long time to come. Andrew (1-2 years) stated that

»I feel like my creativity has definitely grown more since taking the course and shown a lot more on me externally after taking the course. But yeah, I still feel like there's more room to go for sure, but I think there's always just going to be more room to go.«

The majority of participants pointed out that the course helped them to see more than the creative product and end result, and that they gained more insight into and appreciation for the creative process, which represents another key factor for continued personal and professional growth. Timothy (7-8 years) mentioned that this new understanding helped him reframe and redefine creativity, which since the course, he considers the most critical skill he can have in life. He said

»It's so important to show that you have got a willingness to learn and a hunger to challenge yourself and really push boundaries within your professional career. And I would probably say it's the most valuable skill that I continue to learn and I continue to take inspiration from.«

After the course, creativity has become a powerful tool that can enrich, and in some cases accelerate, the journey of personal development. Anna (5-6 years) alluded to this by pointing out

11 Simonton, Dean Keith. 2000. »Creativity: Cognitive, Personal, Developmental, and Social Aspects.« *American Psychologist* 55 (1): 151–158. <https://doi.org/10.1037/0003-066X.55.1.151>.

producing creative works in multiple media formats.¹² Based on the findings in this study, several new skills associated with and resulting from creativity training can be added to the definition of creative literacy. Therefore, I will expand the definition of creative literacy and describe how creativity training leads to specific skills that can enhance the current definition and meaning of creative literacy. I will explain the newly defined concept of creative literacy in more detail at the end of the discussion.

DISCUSSION

C-SPECD | A FRAMEWORK FOR CREATIVE LITERACY

An overall realization that was shared amongst all participants was the fact that creativity is something rather complex, highly individual and closely associated with the person who experiences creativity. This complex creativity occurs within ourselves as well as outside of ourselves as creativity exists and happens externally around us. The internal and the external creativity are intertwined, co-exist and influence each other within a complex system that is driven by many influencing factors described by researchers such as Rhodes, Guilford, Beghetto, Sternberg, Amabile, Kaufman.¹³

The data analysis revealed strong evidence for a theoretical framework consisting of six major influencing factors that represent the complexity of how creativity happens as a system and how participants experience creativity in their personal and professional lives within such an interconnected system. While the six dimensions are interrelated and correlate with each other, they represent two distinct areas:

Six dimensions of The Self – The Conscious Self, The Creative Self-Identi-

12 Healey, S. P. (2009). *The Rise of Creative Writing and The New Value of Creativity* [Dissertation, University of Minnesota]. <https://conservancy.umn.edu/server/api/core/bits-treams/23aee473-97db-439b-82db-6cd2eee40d0e/content>.

13 Karwowski, Maciej; Kaufman, James C. *The Creative Self: Effect of Beliefs, Self-Efficacy, Mindset, and Identity (Explorations in Creativity Research)* (p. xvii). Elsevier Science. Kindle Edition. – *The Nuances and Complexities of Who We Are When We Create: An Introduction to Creativity and the Self* Maciej Karwowski.

ty, The Socio-Emotional Self, The Process Self, The Collaborative Self and the Developing Self – illustrating how creativity manifests itself within the self.

Six creativity aspects indicating how creative literacy is being developed and can affect the overall creative activities, when, how and where participants are creative and experience creativity in their personal and professional setting. The aspects are Self-Identity and Being Authentic, Metacognition and Awareness, Creative Process, Socio-Emotional Creativity, Socio-Ecological Creativity and Creative Possibilities Journey.

The theoretical framework illustrates how the skills and experiences, that participants gained during the course, have turned into what I call »Creative Literacy«, an inventory of skills and capabilities grounded in creativity, creative thinking and creative process that emerged as major outcomes of the creativity training. Creative literacy means that there are various skills that are being developed during the journey and experience throughout the course of a 14-week creativity course.

In the following, I will outline in more detail, the »Creative Literacy« framework and its six major themes, as well as describe concepts that are associated with the individual person experiencing creativity both at the societal level as well as on a personal level.

Literacies have been used in higher education for quite some time. Initially, the term literacy meant the development of writing and language skills to prepare a life beyond education where literacy helps cope with the complex world beyond the classroom.¹⁴ As the world has changed during the last few decades and humans have experienced numerous developments in areas such as technology, media, finance and the arts, departments at universities established literacies in connection with the development of learning outcomes associated with specific course content and skill sets. The American Association of Colleges and Universities currently offers 16 value rubrics such as ethical reasoning, reading, civic engagement, creative thinking and problem solving.¹⁵ Those value rubrics can be used for building learning outcomes in select areas.

14 Healey, Steve. »4. Beyond the Literary: Why Creative Literacy Matters.« In *Key Issues in Creative Writing*, edited by Dianne Donnelly and Graeme Harper, 61–78. *Multilingual Matters*, 2012. <https://doi.org/10.21832/9781847698483-007>.

15 Association of American Colleges and Universities. 2021. »Inquiry and Analysis VALUE Rubric.« <https://www.aacu.org/initiatives/value-initiative/value-rubrics/value-rubrics-inquiry-and-analysis>.

The term artistic and creative literacy has been proposed in the past, particularly related to pedagogical aspects of K-12 education,¹⁶ as well as the subject area of creative writing within higher education and K-12.¹⁷ Yet, creative literacy has not been established as learning objectives encompassing a broad perspective of creativity from a humanistic and a systems approach. I am proposing a new framework for developing creative literacy that will be described in more detail below. The importance of creativity, creative thinking as indicated by the WEF Job of the Future Report 2023¹⁸ and as mentioned by numerous studies in relationship with innovation, divergent thinking, creative thinking within the context of increased use of artificial intelligence and human learning¹⁹ provide further evidence for establishing principles that can help guide students towards developing creative literacy.

The C-SPECD Framework, consisting of six main themes that have emerged, are as follows:

- The Conscious Self - Metacognition and Awareness
- The Creative Self-Identity - Self-Identity and Being Authentic
- The Self as Process - Creative Process
- The Socio-Emotional Self – Socio-Emotional Creativity
- The Collaborative Self – Socio-Ecological Creativity
- The Developing Self - Creative Possibilities Journey

The findings of this study and particularly the framework C-SPECD relate to several creativity frameworks and creativity researchers presented in Chap-

16 Hrenko, Kelly A., and Andrea J. Stairs. »Creative Literacy: A New Space of Pedagogical Understanding.« *Across the Disciplines* 9, no. 3 (2012): 1–12. <https://doi.org/10.37514/ATD-J.2012.9.3.10>.

17 Peary, Alexandria, and Tom C. Hunley, eds. *Creative Writing Pedagogies for the Twenty-First Century*. Carbondale: Southern Illinois University Press, 2015. https://www.google.com/books/edition/_/DrAqCgAAQBAJ?hl=en&gbpv=1&pg=PA169&dq=creative+literacy.

18 World Economic Forum. *Future of Jobs Report 2023*. 17th ed. WEF Insight Report. Geneva: World Economic Forum, 2023. <https://www.weforum.org/reports/the-future-of-jobs-report-2023/>.

19 Markauskaite, Lina, Rebecca Marrone, Oleksandra Poquet, Simon Knight, Roberto Martinez-Maldonado, Sarah Howard, Jo Tondeur, et al. »Rethinking the Entwinement between Artificial Intelligence and Human Learning: What Capabilities Do Learners Need for a World with AI?« *Computers and Education: Artificial Intelligence* 3 (2022): 100056. <https://doi.org/10.1016/j.caeai.2022.100056>.

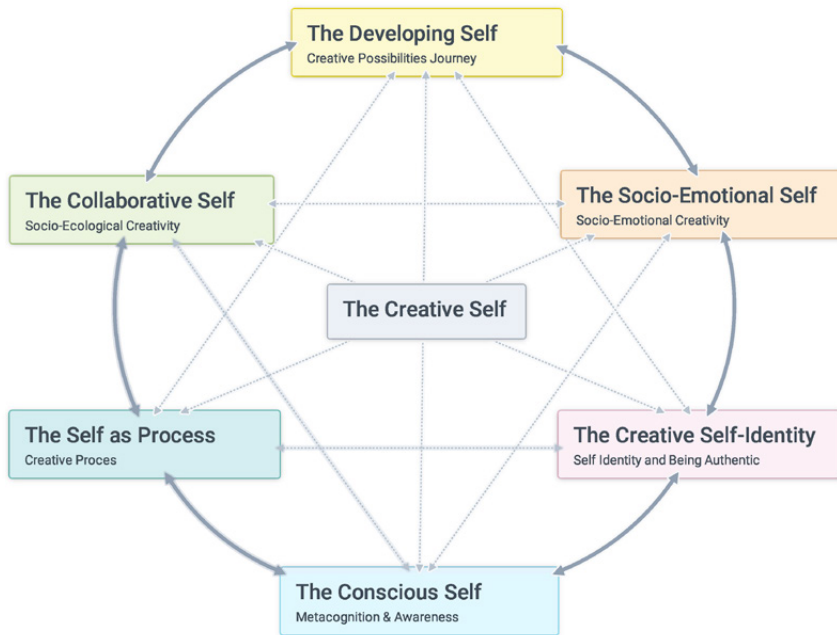


Figure 5-2. The C-SPECD Framework illustrating Six Dimensions of Creative Literacy.

ter Two – Literature Review. While the C-SPECD framework shows a connection to Rhodes, who laid a strong foundation for the field of creativity research with his creativity 4 P model – Person, Process, Place and Product,²⁰ the C-SPECD framework is also related to the work of Csikszentmihalyi (Systems Model of Creativity),²¹ Richards (Everyday Creativity),²² Beghetto and Kaufman²³ (4 Cs) and Glăveanu (The Possible).²⁴

20 Rhodes, Mel. »An Analysis of Creativity.« *The Phi Delta Kappan* 42, no. 7 (1961): 305–310.

21 Csikszentmihalyi, Mihaly. 1996. *Creativity: Flow and the Psychology of Discovery and Invention*. 1st ed. New York: Harper Collins Publishers.

22 Richards, Ruth, ed. *Everyday Creativity and New Views of Human Nature: Psychological, Social, and Spiritual Perspectives*. 1st ed. Washington, DC: American Psychological Association, 2007.

23 Kaufman, James C., and Ronald A. Beghetto. »Beyond Big and Little: The Four C Model of Creativity.« *Review of General Psychology* 13, no. 1 (March 2009): 1–12. <https://doi.org/10.1037/a0013688>.

24 Glăveanu, Vlad P. (2021). *The Possible: A Sociocultural Theory*, Oxford University Press, <https://a.co/8FJ9h96>.

The creativity frameworks such as The Four Ps by Rhodes,²⁵ The Systems Model of Creativity by Csikszentmihalyi,²⁶ Everyday Creativity by Richards,²⁷ The Four Cs by Beghetto and Kaufman²⁸ and The Possible by Glăveanu²⁹ provide an excellent perspective offered by the respective researcher, who looked at the creative process, personality traits, cognitive processes, the socio-cultural environment, and the complexity and inter-connectedness of the many variables responsible for how and when human creativity takes place.

The findings of this study and the C-SPECD framework illustrate particularly how the participants of the study have adopted several key aspects included in the different frameworks offered by Rhodes, Csikszentmihalyi, Richards, Beghetto and Kaufman and Glăveanu and apply them in their everyday creative activities, professionally and personally. The data analysis also unveiled that the key themes included in and addressed by the various creativity frameworks are connected to several human development phases outlined by Erikson.³⁰

The work and C-SPECD framework presented in this dissertation is situated at the intersection of the works by Rhodes, Csikszentmihalyi, Richards, Beghetto and Kaufman, and Glăveanu.

In the following, the six dimensions will be explained in detail and connected to participants' statements as well as related to existing creativity theories.

25 Rhodes, Mel. »An Analysis of Creativity.« *The Phi Delta Kappan* 42, no. 7 (1961): 305–310.

26 Csikszentmihalyi, Mihaly. 1996. *Creativity: Flow and the Psychology of Discovery and Invention*. 1st ed. New York: Harper Collins Publishers.

27 Richards, Ruth, ed. *Everyday Creativity and New Views of Human Nature: Psychological, Social, and Spiritual Perspectives*. 1st ed. Washington, DC: American Psychological Association, 2007.

28 Kaufman, James C., and Ronald A. Beghetto. »Beyond Big and Little: The Four C Model of Creativity.« *Review of General Psychology* 13, no. 1 (March 2009): 1–12. <https://doi.org/10.1037/a0013688>.

29 Glăveanu, Vlad P. (2021). *The Possible: A Sociocultural Theory*, Oxford University Press, <https://a.co/8FJ9h96>.

30 Erikson, Erik H.. »Identity and the life cycle.« In *Psychological issues: Identity and the life cycle; Studies in remembering; On perception and event structure and the psychological environment; Cognitive control*, edited by Erikson, E. H., Paul, I. H., Heider, F., & Gardner, R. (1959). International Universities Press, Inc., New York.

Inspired by Csikszentmihalyi's seminal work presented in his book *Flow and the Psychology of Discovery and Invention*,³¹ in which he uses many rich quotes from his interviewees, I am presenting much of the participants' contributions shared during this study in order to illustrate their extensive learning experiences and give voice to their stories.

THEME 1: THE CONSCIOUS SELF - METACOGNITION AND AWARENESS

»Even when you function on autopilot and you're trying to minimize that cognitive load and you're deciding which things you are going to spend less time on, that is a creative decision because you're consciously choosing to spend your time elsewhere.« Himani (9-10 years)

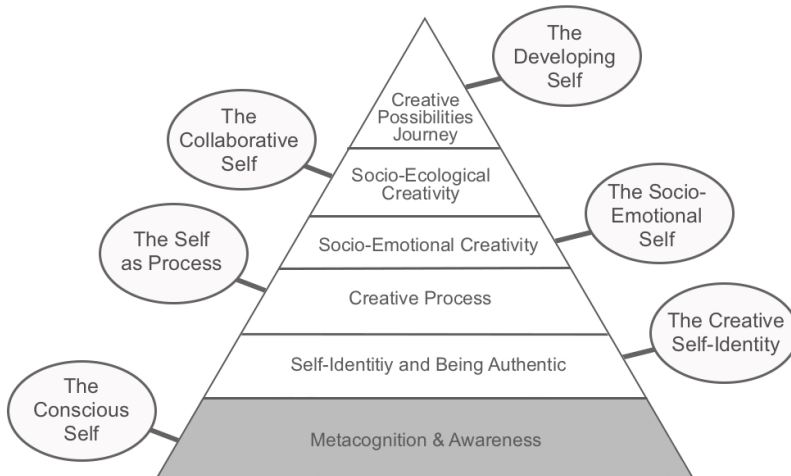


Figure 5-3. The C-SPECD Framework illustrating Six Dimensions of Creative Literacy- Pyramid Model. Illustration by Alexandra Vogel.

31 Csikszentmihalyi, Mihaly. *Creativity: Flow and the Psychology of Discovery and Invention*. 1st ed. New York: HarperCollinsPublishers, 1996.

Metacognition relates to a person's knowledge of their cognitive processes and the regulation of how the knowledge is being applied, particularly in areas such as »planning, monitoring and evaluation.«³² Participants mentioned the ability to connect their inner world with the outer world and recognize how the interaction and interconnection between inner world and outer world are situated. Once a person has become aware of their own self as well as of the external circumstances, situations, they are capable of positioning themselves within this interconnected relationship and can decide actively which direction they might want to take on. It is the ability to become more aware of the world around oneself and to connect external aspects to inner thoughts and mental processes, particularly those thoughts and mental processes related to creativity, a creative process and creative thinking.

As these cognitive skills allow us to position ourselves within our world, environment and given settings, might it be in a personal context or related to professional endeavors and circumstances, it is important to recognize that the development of metacognition and awareness have been closely associated with creative thinking skills and creativity training programs.³³

Anna (5-6 years) associated the awareness and metacognition with the ability to be present and to broaden her world view allowing her to become more independent, more intentional and to take more control and responsibility in her personal and professional life, as she pointed out

»Another thing that I remember from the class is to be present. It was one of the themes that stood out to me about being present as a tool to broaden my perception of the world to be more critical in perceiving and interpreting the world and also as a tool to open up to new solutions or new creative solutions to existing problems.«

32 Hargrove, Ryan A., & Nietfeld, J. L. (2015). The Impact of Metacognitive Instruction on Creative Problem Solving. *The Journal of Experimental Education*, 83(3), 291–318. <https://doi.org/10.1080/00220973.2013.876604>.

33 Hargrove, Ryan A., & Nietfeld, J. L. (2015). The Impact of Metacognitive Instruction on Creative Problem Solving. *The Journal of Experimental Education*, 83(3), 291–318. <https://doi.org/10.1080/00220973.2013.876604>.

She continued by describing how her awareness, metacognition and self-awareness help her in her professional life as she is able to see a job and its description not only as is but as something she wants to make out of. She described and connected awareness with a mindset, allowing her to see things differently and having the freedom to decide how she wants to see and interpret something and that she can become an active agent and conscious decision maker taking specific mental and tactical steps towards achieving her goals. She said

»The creative thinking course was impactful in terms of opening a new understanding for me that jobs, my job is impacted a lot by my attitude toward it. And even though every job comes with a description, it doesn't mean you are boxed in with the way people expect you to do things, with the way people expect you to achieve success or with the way that people expect to collaborate with you. I think with that attitude in mind, now that I'm working, I have switched the job about two or three times. It puts the burden on me to take the initiative if I want to be promoted, if I want to take on extra challenges, if I want to have more visibility. So, it defaults back into me as the one who needs to see the opportunity, be aware of what I'm working on, what I'm doing, be aware of my surrounding and take the initiative to make what I want happen. So, without that thinking, I thought without that creative thinking switch, I think I might have stayed at my first jobs for significantly longer because honestly the job was, the pay was lousy, but it was stable.«

Anna continued by describing how the creative thinking course helped her build the ability to not only depend on situations, managers organizations and feeling passive or even powerless. Instead, the creative thinking course helped develop the awareness, metacognition, self-awareness to asses herself and see herself from the outside and making changes and decisions where she sees appropriate to achieve what she wants to achieve. She added

»The creative thinking thought, really, it broke the pattern for me as a professional, the pattern of looking or defaulting to other people, my managers or my leaders to create meanings for my work or to create meanings

for my professional life and switch that around into me being in charge of everything. A big thing about creative thinking that I remember from the course was to take initiative to practice it.

And I think years and years and years of practicing it made it into a nature for me now that I look both outward and inwardly. So, outwardly seeing what people are doing, but also inwardly seeing how I feel, what I'm thinking, where my mind is at. And that gives me a much better balance in terms of work-life balance, but also a balance in terms of perseverance versus progress.

There's that constant question in mind for me about, oh, whether I should stick through, just suffer it for why, but get the results or whether I can do something about it. So, I think the creative thinking skills and the mindset and the concept I got from the class, it was a source of courage for me to step in and take that balance back to be more defaulting toward myself.«

AUTOPILOT THINKING

Anna (5-6 years) described what value creativity holds in her life and explained how creativity increased her awareness and conscious decision making that allows her to distinguish when she is on »autopilot« versus being in the »driver seat« and making conscious decisions and being more intentional and that she applies this skill on a daily basis. She stated

»70% of the time when I'm about to do something, I find myself asking the question. I find myself pausing and asking the question, am I doing it unaware? Am I doing it? Am I just autopiloting through it? So, it's definitely a central piece in my thinking process through everything in life. So, it is even something as small as thinking about what to have for dinner. I do the cooking at home, what to have for dinner, and usually it is a very easy task of, oh, let's open the fridge, see whatever materials you have in the fridge and whip up a meal out of it for convenience.

But I do find myself pausing and thinking about is it autopiloting? Am I just doing it so that I get the thing done, I get food and I get fed and not hungry, or what am I doing here? And then that is the conscious. And there came a conscious conversation between me and myself basically about what am I hoping to get out of it? Am I looking for enjoyment? Is it a meal to celebrate with something? Am I looking to, did I have a bad day that I need a good meal, a comfortable meal so that I can cheer up myself? Did I have a good day, or is it a busy day that I really just need something quick and fast and easy so that I can get the time back to do something else? So, it definitely helps me do things with more purpose and minimize the autopilot thing that I am the amount of autopiloting that I engage in daily.»

Metacognition was also mentioned within the context of being on ‘autopilot’ and being ‘unaware’ versus ‘aware’ of one’s actions and thoughts. Ken (3-4 years) mentioned his process of becoming aware when he was asked about creativity in general. He pointed out that through the course he developed an ability to become aware of his autopilot thinking and subconscious thinking, a kind of thinking when very little awareness takes place. In contrast, he shared that he learned during the course to recognize that »autopilot« situation and to become an active agent in shifting his thinking from auto-pilot to ‘active driving mode«. Ken (3-4 years) explained

»It [creativity] helps me every single day. You do have to make a conscious choice to be creative. I think it’s very easy, especially in a corporate environment, to kind of turn that off to go into autopilot. And I don’t think you can be very creative when you’re an autopilot.«

He mentioned the ‘thinking about the thinking’ as a positive change and as a skill that he added after the course, as he pointed out

»It is always nice to think about thinking. You have to think about your own creativity. You have to think about how you feel about ideas, things like that. You have to think about your own thinking in that class, and

I think that's just helpful in personal life as well. You have to just think through different situations in life as they come. So, I think just always being able to think about your own thinking is helpful.»

Thinking about the thinking is a concept mentioned by Aristotle as he considered thinking as a major ability that distinguishes ourselves from other living beings. He considered human thinking taking place in two different ways, being able to respond to thought and having thought and doing the actual thinking.³⁴

Although some participants might not be aware of the term metacognition, they clearly described metacognition in action and elaborated during the interviews how their thinking changed because of the course experience. They have become more aware of their thinking and creative process, two entities that go hand in hand and represent two dimensions of the creative literacy framework C-SPECD.

Being a creative thinker and applying cognitive processes such as metacognition, awareness and self-awareness requires mental energy that can be exhausting. Yet, by knowing the power of this cognitive ability and knowing how it can influence not only the creative process but the creative product resulting from this mental power, it provides a tool to switch back and forth until the right direction, idea or solution is being achieved with an active consciousness and awareness.

By becoming more aware and cognitively alert of one's own creative abilities and acknowledging that everyone can be creative, as long as certain parameters like hard work and awareness are being combined, the previously held beliefs will change and we recognize creative abilities in other people despite the fact that those people might not even see the creative ability in themselves. Most likely, they could benefit from a creativity course and going through the many aspects of unlearning and practicing their inner creativity and watching others do the same.

Xiaomin (1-2 years) spoke about her newfound awareness and metacognition as she described a change of thinking about her »thinking pattern« and

34 How to Flourish: An Ancient Guide to Living Well (Ancient Wisdom for Modern Readers) by Aristotle. <https://a.co/ajSxbD1>.

that she learned how to embrace the process of thinking and the awareness instead of focusing only on the end result or the outcome of the creative process. Before the course, she was completely unaware of her thinking and of her creative process, and was focused on achieving a goal or producing an end result or just completing a task she was given. The course provided her with the ability to apply metacognition, awareness and self-awareness as she pointed out

»So, before that course I didn't think about people can have different thinking pattern. But in that course, I learned about different thinking balance. I also have some impression about how we think about not just simply brainstorming because before that course, when I think about some strategy or plan, I just want to finish the task. I didn't want to do it in a different way, but after the course and after I learned about the thinking pattern, sometimes I think it just become one of my habits to think about playing the task in a creative way or in a more serious way because I really want to do that thing really well, not just simply finishing the task.«

Himani (9-10 years) explained how valuable she considers creativity in her life and made a distinction between those who are aware of their creative thinking and thought process versus those who operate on auto-pilot. Again, the theme of conscious versus unconscious thinking and the increased awareness and metacognition that comes from having experienced creativity trainings, can be seen in her explanation as she outlined

»When you ask people, people will tend to think of creativity in a very boxed way and say, yes, I was creative because I drew this drawing, or yes, I was creative because I made this certain presentation. But they don't think of creativity in a way that how you dress every morning is still creativity. You are making a conscious choice and you're choosing to put something versus something else. It's a tradeoff and every decision that you're making is a creative decision in some ways. And even when you function on autopilot and you're trying to minimize that cognitive load and you're deciding which things you are going to spend less time on, that

is a creative decision because you're consciously choosing to spend your time elsewhere. And I think we tend to think of those as very functional, but I think it's really hard to think of one without also thinking of the other. It's very hard to split that cleanly and measure it.»

The above statement is another example of how complex and intertwined creativity is and how the different facets of the C-SPECD framework are simultaneously at work while influencing each other. The relationship and interconnection between creativity, creative thinking and creative process becomes obvious.

Andrew (1-2 years) described metacognition and the ability to think about the thinking when he was asked to define creativity in his own words. He offered a definition that illustrates the mental thought process and cognitive skills as he said

»I think that creativity can be defined as the thinking of an idea, I think that having an idea can be like a thing, it can be a good idea, it can be a bad idea. It doesn't necessarily mean it's creative. I think that the thinking behind the idea and the pathways on how you get there is what creativity is supposed to be. I think having you go through the obstacles of coming up with this idea and the different patterns that you have to go through in your brain, will this work? How will this work? Will this be effective towards somebody who sees it? That kind of thinking is how I would define creativity.«

Valerie (5-6 years) illustrated the notion of not going back to before the course after the »light switch has been turned on«. As she answered the question if her personal views or actions might have changed after having completed the course, she responded

»I think part of it is just the understanding of creativity. I've put into practice a bit more just by creative problem solving in everything. I just think that I'm so much more aware. I think I might've been doing things before, but now I'm more aware of it and if there is a problem, not shy-

ing away. And I think too, once you're aware of it, you can't really turn it off.»

Juan (7-8 years) spoke about how his increased and improved awareness and metacognition helps him operate at a different level as he can assess life situations, problems, and challenges, and then adjusts his thinking and find mental clarity to decide his next steps. In the following statement he addressed how he uses his creative thinking skills when assessing situations in his professional work as he described how he takes multiple aspects into consideration and then thinks creatively and then adjusts his thinking to achieve his goals but also get the buy-in of all stakeholders so that he can ensure or increase the chances of succeeding. This illustrates how complex creative thinking is and how systematic creative thinking skills can be applied in the systems theory approach as he pointed out

»When as a human you have ups and downs, whether mentally or anything, your creativity tends to lose consistency in terms of quality. So, you have to, once you gauge everything around you and you understand and you have a very, very crisp and clean understanding of this situation as a whole, you will find that and it's proven and then you begin to prove it and it's accepted. Your mental consistency is at a high level. So that means you have comfort to think about creative ideas, solutions, and you just have more mental bandwidth to find ways to make better, to drive results, to drive not just results, but ideas and think of ways to how to do things truly better.»

The data analysis revealed that creativity cannot be turned back or diminished, once it has been understood as a thing, a belief, a tool or an identity. The concept 'the Genie coming out of the bottle, and you can't put her back « and the fact that participants could not forget what they unlearned and could not go back to the reality before the course, emerged as another salient theme during the data analysis and represents a connection to »The Conscious Self – Metacognition and Awareness«. Once the participants had undergone a creativity training program and were immersed in it, the newly learned methods, cogni-

tive changes such as metacognition, awareness of different thinking styles and directions, could not be taken back. Once a subject has learned the subject (creativity) during a course, the cognitive processes involved in developing new learning, thinking, unlearning, awareness and metacognition cannot be put back. It appears like a horse that has left the gate and has started a new journey, potentially a lifelong journey that provides the tools and skills to deal with the known and unknown.

As the relationship between the increased awareness, metacognition and the conscious self, as well as a connection to the course has been expressed in the previous statements, the next section will explore how the developing conscious self relates as well to the creative process.

THEME 2: THE CREATIVE SELF-IDENTITY - SELF-IDENTITY AND BEING AUTHENTIC

»Everything you do is an act of thought and self-expression to who you've created.« Hunter (3-4 years)

Creative Self Identity emerged from the data analysis as a major outcome that participants mentioned and connected to their course experience. Creative Self Identity results from the self-belief, mindset, self-awareness, self-expression and confidence developed during the course in connection with creativity. According to Dollinger and Dollinger, »Identity is viewed as the physical and psychological characteristics not wholly shared with others or making a person (or group) distinctly different from others, and involving a sense of continuity.«³⁵ It has been shown that artists draw from their creative activities and work and use their creative energy to define themselves and see themselves as creative individuals.

35 Dollinger, Stephen J., and Stephanie Clancy Dollinger. »Creativity and Identity.« In *The Creative Self: Effect of Beliefs, Self-Efficacy, Mindset, and Identity*, edited by Karwowski, Maciej; Kaufman, James C. (Explorations in Creativity Research) (pp. 49–64). Elsevier Science. Kindle Edition, 2017.

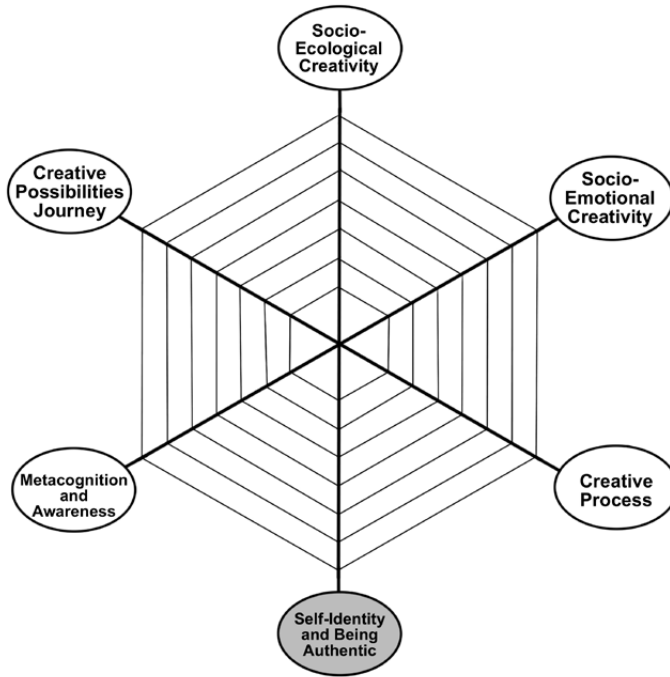


Figure 5-4. The C-SPECD Framework illustrating Six Dimensions in form of a potential tool for gauging Creative Literacy – Spider Web Model. Illustration by Alexandra Vogel.

Developmental psychologist Erikson³⁶ considers the formation of identity³⁷ as part of the human development that particularly relates to stage 5 (Identity vs Confusion) that typically happens during teenage years 12-18 and stage 7 (Generativity vs. Stagnation) during middle age from 40 to 65.³⁸

36 Erikson, Erik H. »Identity and the life cycle.« In *Psychological issues: Identity and the life cycle; Studies in remembering; On perception and event structure and the psychological environment; Cognitive control*, edited by Erikson, E. H., Paul, I. H., Heider, F., & Gardner, R. (1959). International Universities Press, Inc., New York.

37 Dollinger, Stephen J., and Stephanie Clancy Dollinger. »Creativity and Identity.« In *The Creative Self: Effect of Beliefs, Self-Efficacy, Mindset, and Identity*, edited by Karwowski, Maciej; Kaufman, James C., (Explorations in Creativity Research) (pp. 49–64). Elsevier Science. Kindle Edition, 2017.

38 Albert Robert S. Identity, experiences, and career choice among the exceptionally gifted and eminent. In: Runco MA, Albert RS, eds. *Theories of creativity*. Newbury Park, CA: Sage; 1990:13–34.

All participants mentioned that their own creative self-identity was sparked during the course, which, considered with the lens of the developmental phase took place after the fifth stage and before the seventh stage of human development according to Erikson's model. This puts an even greater emphasis on the fact that a creativity course and specific training in creativity, creative thinking and creative process can have an impact on humans independently of the developmental phase they are in.

During the creativity course, an internal thought process takes place that is paired with unlearning of old concepts and gaining a new understanding for previously held beliefs. While many participants did not consider themselves as creative prior to the course, their belief and their self-image were being changed and replaced by a newly defined self-concept, in which the participants saw themselves as active creative individuals. The course caused participants to reflect and ask existential questions such as »who am I?«, »what do I believe?«, and »what shall I do with my life?«, and helped participants build creative confidence, strengthen their own self-belief and image about what a creative human looks like and what creativity can be.³⁹

Charles (9-10 years) pointed out how he realized that judgment by others had interfered with how he saw himself within the context of creativity and that during the course, a mind shift took place. He said:

»Creativity is something that's latent within you, and that you can unlock it. I got that from the course, that was the big takeaway for me, to understand that I am a creative person.«

Manuel (9-10 years) spoke very confidently of being a creative person. When asked about how the course influenced his thoughts and feeling about his own creativity, he shared

»I can very competently say that I am a creative person and I can talk about creativity with a lot more confidence and authority, and I can

39 Dollinger, Stephen J., and Stephanie Clancy Dollinger. »Creativity and Identity.« In *The Creative Self: Effect of Beliefs, Self-Efficacy, Mindset, and Identity*, edited by Karwowski, Maciej; Kaufman, James C., (Explorations in Creativity Research) (pp. 49–64). Elsevier Science. Kindle Edition, 2017.

connect it to some of that envision that is still in me or some of that hunger and desire to do more, or willingness to explore uncharted territory. I continue to have that, and I can now associate with it and connect it a lot more to creativity given some of the things that I learned in the course.»

He continued by stating that he is applying creativity on a daily basis and that creativity is part of himself as he pointed out

»It is something that I lean on very much. I lean on as a personal strength of mine and differentiator in my field, something that actually, even though I don't practice it outside of my work necessarily, I don't do the exercises, but I probably use creativity all the time on my day-to-day, whether I'm thinking of it being creative or not, I'm using it just all the time and something that I love appreciate about myself, I can talk confidently about.»

Becoming free to make decision by ourselves and being able to disregard or at least put other people's opinion about ourselves in perspective was another theme that emerged from the data analysis. The feeling of being »caged in« as well as experiencing relief when using creativity, creative thinking and creative process was addressed by the majority of participants. Hunter (3-4 years) expressed her relief and a newly gained freedom after having taken the course, and offered the following remarks:

»My thoughts and feelings after experiencing creativity in the course, the feeling was relief. Knowing I didn't have to fit into any molds, knowing that we don't have to conform to what we think other people want, not having to people please or stay in the lane just because it's comfortable. I think that a lot of people like to stay here it's comfortable and because it's easy and for some cases it pays the bills.»

CREATIVE SELF-IDENTITY AND CREATIVE SELF EXPRESSION

In the following, Hunter (3-4 years) elaborated further how creativity relates to herself and is part of her identity and how a creative mindset as well as creative self-expression is part of who she is and how she lives her life, as she offered the following insight

»For me, like I just said, it [creativity] helps me, it's of the highest value to me. It's one of the things that since the creativity course I hold in such high regard because creativity is the root of your individual expression. It's in what you wear, how you do your hair, what makeup you choose to do, what earrings, jewelry you might wear, what songs you might listen to. And a lot of people would just akin that to being things that you like, but it's the way that you want the world to see you or the way that you see yourself behind closed doors. And that's our expression of self and self-expression is a big form of creativity.«

She continued adding that self-expression and creativity, and self-creation and identity creation are closely tied together.

»Everything you do is an act of thought and self-expression to who you've created. The word creative, created and creative need to be closer, created yourself a persona and it took some amount of creativity and thought to get to where you are and who you choose to show to the world and who you choose to be, whether that's your authentic self or not. Creativity allows us to be introspective and it allows us also to push ourselves.«

The above-described self-expression illustrate what Karwowski and Kaufman describe as »expression of thoughts, ideas, feelings, and emotions that, when not manifested verbally in interpersonal contexts, are preferably expressed through creative activity.«⁴⁰ Self-expression is part of human activities and in-

40 Barbot, Baptiste, and Heuser, B. »Chapter 5- Creativity and Identity: Formation in Adolescence: A Developmental Perspective« – Karwowski, Maciej, and James C. Kaufman. The Creative Self: Effect of Beliefs, Self-Efficacy, Mindset, and Identity. Boston, MA: Elsevier, 2017.

fluences the developmental process leading to greater creative self-efficacy and creative self-identity. Hunter then continued by pointing out how creativity and the course experience have allowed her to be more mindful and intentional and how creativity allows her to be authentic and be her true self, illustrating her »mindful capacity« to reflect and adapt her actions.⁴¹ Reflecting and re-interpreting who we are and what we have done in the past allows us to develop ourselves and our individual creativity. Becoming more conscious about how we are and how we act provides a building block to identify problems, take initiative and make progress towards self-actualization.⁴² Hunter shared how the course opened up her mind to see herself in the most authentic way, becoming free and independent of external expectations and using creativity to pursue her authentic self. She shared the following statement:

»And then as we went through the course later, I would also say that I kind of had the stance of not taking things too literally. But, if you are going to have to do something with a prompt, to add yourself into it in your own twists, because otherwise you're not really being authentic to who you are. You're not being authentic to what you can bring to the table. You're stifling your creativity if you're just going to follow the prompt step by step with no thought.«

The unlearning of habits allowed Hunter (3-4 years) to see herself and to add herself actively into the mix of every creative endeavor instead of staying on the sideline and being just a bystander or spectator. She added

»I think the main thing is you need to unlearn your habits and to find ways to be different in yourself. And when you can do that in combination with your creativity, you can really flourish in the space.«

41 Runco, Mark A. »To Understand Is to Create: An Epistemological Perspective on Human Nature and Personal Creativity.« In *Everyday Creativity and New Views of Human Nature: Psychological, Social, and Spiritual Perspectives*, 91–107. Washington, DC, US: American Psychological Association, 2007. <https://doi.org/10.1037/11595-004>.

42 Dollinger, Stephen J., and Stephanie Clancy Dollinger. »Creativity and Identity.« In *The Creative Self: Effect of Beliefs, Self-Efficacy, Mindset, and Identity*, edited by Karwowski, Maciej; Kaufman, James C., (Explorations in Creativity Research) (pp. 49–64). Elsevier Science. Kindle Edition, 2017.

Hunter's ability to reflect and look into her inner world relate to what Jung and Maslow describe as the building of authenticity and the »inner self,« distinguishing between personal aspects in comparison to social aspects when we think who we are and who we might want to become.⁴³

Juan (7-8 years) explained how creativity is part of who he is and that he doesn't really think about it much. He just incorporated creativity into his life and internalized creativity into how he lives his life. He explained how he has gotten to value creativity after having taken the course, as he pointed out

»I don't think about creativity on a conscious daily basis. Creativity is part of who I am. My creativity, the way I see it, it's part of who I am. And it's just developing based on the experiences that you put yourself in. Any experience, any.«

He added, that in his opinion, creativity represents the ability to make up our mind for ourselves as he pointed out

»[Creativity] It's where your fiber and your character and your drive and personality come into play, and you make the decision as to where you go, where do you want to be?«

Ivan (9-10 years) distinguished between being a creative person and being creative and that he makes conscious decisions about when and how he applies his creativity. His perspective illustrates how creativity shows up in his life and how he – the creative self – can apply creativity differently based on his surroundings as he differentiates the need of being creative for himself versus for other people or in specific life situations.

»Being creative is not as important as being a creative person. I'm going to be a creative person no matter what I'm going through, and I can have solace in

43 Dollinger, Stephen J., and Stephanie Clancy Dollinger. »Creativity and Identity.« In *The Creative Self: Effect of Beliefs, Self-Efficacy, Mindset, and Identity*, edited by Karwowski, Maciej; Kaufman, James C., (Explorations in Creativity Research) (pp. 49–64). Elsevier Science. Kindle Edition, 2017.

that. But there are times where being creative for the sake of my own pursuits, or it's not in my best interest. So that's just not how my creativity needs to be applied. Sometimes I need to apply for my kids, my wife, what my job wants from me, or what some other person or entity in this world that means something to me, wants for me. And being able to recognize I'm always going to be a creative person, but there are ebbs and flows to win and how I need to be creative is important to recognize in my world and my space because I can't just do what I want. I can't just be creative for my own sake, in my own ways, in the way that I want all the time, every time. It's not my reality.»

As he contemplated at the end of the interview, he added the following final words by summarizing

»I don't know if other people will say this or do it or whatever, but I mean the course and the course for sure, specifically in the overall program, so many things that I just think about and have taken forward, that helped me believe in myself and helped me trust in my creative ability and other abilities, in ways that anchor me, in ways that I don't think I would've had without it.»

UNLEARNING

Darika (7-8 years) offered her perspective and how her self-identity is closely connected with the concept »unlearning« and getting rid of previously held notions and beliefs. She described how she did not feel confident in her creative abilities at the beginning of the course and that the course helped build her confidence, as she stated:

»I remember, I think this was the first class where you asked us all who all think you're creative. And my hand didn't go up. And I think there were maybe two or three people in that entire class who raised their hand and said, we're creative. Today, if somebody asked me that, I would probably have both my hands up and more.

So, I think it was unlearning and getting rid of the walls that we built, getting rid of the judgment, getting rid of the self-doubt because the ideas are there, everything is there. It's just we doubt ourselves; we doubt our ideas. And I think that's where we get lost. The unlearning was, to get rid of everything that you've been told, get rid of culture barriers, thought barriers or whatever, subconscious conscious barriers and just to focus on what the idea is.

So, while you lay the foundation for us in the class to recognize it, I think that was a start to start recognizing where you're doubting yourself. And after that, I think once you helped us do that, there's no looking back. So, it just gets stronger and stronger with every passing year.

And I think now, I think we're almost, it's been seven years, so imagine that unlearning has been such a continuous process and seven years later I've unlearned so much more and found myself so much more. Today, if you ask me, I'd say, you know what, I'm really creative. And I think that was the biggest unlearning to unlearn all the rubbish that was going on in my head and just focus on what it actually was.»

Anna (5-6 years) shared the feelings she experienced during the course and how it shaped and changed her self-image, confidence and creative self-identity as she shared the following

»So, I have immediate feeling during the course. I have immediate feeling after the course and I have feelings now. So, let's start with during the course. I was very excited that no one has made me feel able of being a creative person. I never had that feeling that, oh, I can be creative or creativity, something I can build toward, I can train for, I can acquire. I was also very excited that we got a more scientific look into creativity and not just a concept, not just a human attribute.

I used to think about creativity as someone who is, you're born tall, you're born funny, you are born smart or not. So, I was excited. And also, I have never put that much thinking into, I never thought that I was creative. I

thought I was a hard worker and I thought I was overachiever because of that. But now creative thinking, the new perception and creative thinking brought me this new feeling that, oh, this is actually doable, achievable. And I was excited to learn more.»

Anna then continued by explaining that the course and creativity at large, has helped her change her outlook on things and being in the middle of her own creative journey. She shared

»Okay. I think that I am way more positive and more aware about creativity, not just as an occurrence, but as a result of systemic training and commitment and awareness. So that is one, I think of myself as in a middle point of a journey that started with understanding creative thinking, understanding the design behind it, understanding it as a concept and not just as a mythical value or not as a mythical trait or characteristic. I think I am in the middle of the journey because it was hard at first. It was hard to build a habit around it. It was hard to integrate it into my life as a constant force and not just as a, oh, I learned something really nice, let's try it. So, getting over that barrier was hard to really believe in it and build it into my life.»

Hana (7-8 years) spoke about how the creativity course helped her rediscover the creativity she had as a child but then lost touch with it and explained how the course helped her to establish herself as a creative person in general. She also described how the course helped her questioning things and how creativity allows her build her own identity and authentic self as she mentioned

»I think that class also allowed me to become very comfortable asking a lot of questions about what I do and what I want to achieve when working on a project. I know that the class did a lot for me when I was looking for a job. When it comes to the design field, people want you to show you or show them who you are. And in order to do that, everyone can send a resume, anyone can send a portfolio, but what's more interesting is showing them who you are. That's what they care about, how you can be different, how you're an asset and they're looking at a thousand resumes, how is

yours going to stand out? And I know for a fact that this class helped me distinguish who I wanted to be and how I could differentiate myself. The funny thing too is this didn't only happen for me professionally, this also happened for me personally within my dating life, which is a very funny crossover that I'd never thought I could say.»

Maria (1-2 years) elaborated in a similar way that the course and her newly found creativity allowed her to question herself and to dig deeper about who she was and wanted to be or become. She pointed out

»So, when I graduated from college, I was trying to figure out what to do professionally and I took a lot of time to brainstorm and understand who I was. And I took a lot of what I learned from in class and applied that to kind of thinking about myself. I spent a lot of time with pen and paper away from computers, away from anything digital and specifically took a lot of time to glue things on my wall to understand who I was. And I took it as an opportunity to ask questions about myself more than just who I am, what I want to do and who I want other people to know me as. And really dug deep in it using social media as a way to see how do people perceive me, people who've only known me maybe socially or only who've known me for a year, asking questions and getting responses, adding those onto my wall to really try to understand that. And funny enough, so I was able to kind of get a sense of who I was with that.»

She added how the course helped her to better understand herself and her own creativity as she said

»I think the classes had a huge impact on me. I genuinely believe it's what helped me find my own, I don't want to say it this way, but my own flame, my own ability to understand who I can be in this world and understand that my thinking, even if it's a little bit odd or off or not necessarily right. I grew up being told it was wrong. A lot can be right and I can make it right with how I present it and how I talk about it and make it relatable to other people.»

She pointed out that the freedom to think she was given in class paired with the course material and content allowed here to discover herself as she explained

»I think if I wasn't given the freedom to think in that class and to those projects that we did really engrave something in me and I continuously talked about them since I graduated because it was like you allowed us to find ourselves, this sounds dumb, you allowed us to find ourselves creatively. And I got to kind of get to know my own thinking, get to know my thoughts and my random ideas and be able to connect with it and actually do something with it.«

CREATIVE CONFIDENCE

Darika (7-8 years) connected her course experience with an increased confidence in general but also that she has become more confident in not dismissing her ideas and presenting them to others without the fear of being judged. This shift relates back to the course, which helped her see herself as part of a larger system in which she can make her own decisions how to live her life and how to interact with others. She pointed out

»I'm more confident about my ideas. I am not dismissing the first ideas that come to my mind. My voice is louder. I have the courage now to stand my ground. Today, if I'm sure of something that I have an opinion or an idea about something, I think I have more confidence to stand by it and believe in it. I think the bigger word is believe in it because I've not dismissed it.«

This newly gained confidence and understanding now has become a main ingredient displaying her creative mindset, as she added

»I think it also makes you more self-assured really, because what happens is if you're, let's say, given a project and what would happen earlier [prior to the course], if an idea or a thought would come and you'd brush it aside, say, this is silly. But I think now, and this is something that you told

us, there are no silly ideas. So, when there are no silly ideas, then it automatically gives you the courage to implement what you're thinking. So, then the dependency on others becomes less. I think it also in a way makes you more independent and more, and that of course reflects everywhere. It reflects personally and professionally.»

Creative confidence also is illustrated by the trust in one's own work as Maria (1-2 years) pointed out

»I have a lot more trust in my work. Not thinking that it's better, not thinking that it's good' but it's my idea so why not show it? Why not talk about it? And if I don't care if it's wrong, I don't care if it's right, I just care that it was an idea that I had and I get to share it.«

Maria (1-2 years) connected confidence with her belief that she can do it and that she is able to execute on her ideas as she pointed out

»What I found is the course has pushed me and these friends to really believe in our ability to do it.«

Maria shared one last thought at the end of the interview and connected the course experience back to confidence and the fact that creativity is highly individual and a source for everyone's individual passions, as she said

»This class helped boost my confidence and allowed me to really understand that I can think of anything and I can try it out and I can do something with it and it not be weird or wrong, but it's innovative and fun and cool and different. I think at the end of the day, creativity also should be for you, you as a person to find the things that kind of light your fire and get you excited and make you hungry for more. This class pushed me and other people to find ways to do other things with what we love to do and try to make it ours more, but also try new things even more.«

The above statements illustrate what psychologists describe as the development of agency and the building confidence that allows us to identify how we are affected and influenced by others and how we want to position ourselves within society at large. This confidence, agency, self-efficacy and self-belief allows us to take charge of our own personal and individual course.⁴⁴

Sage (9-10 years) summarized her creative confidence with her ability to have a seat at the table and to be part of the conversation in her professional life as she pointed out

»That course really taught me that anybody can be creative. And so, I really remember, especially out of college, I was very much wanting to be at the table on creative conversations. Even though I was in a more traditional account service or strategy role, I wanted to kind of bring forward my creative ideas as well and be involved in brainstorming. And I actually was able to, my first career, first job at [agency name] in Boston, I was actually able to put together this program called Think Shops.«

She continued by drawing a direct connection between the course and her confidence by stating

»Confidence in just my ability to think differently and think outside the box. And I mean, I think at Emerson it can be kind of intimidating. You work with all these people who kind of have very deep passions about whatever it is that they're doing. And so, I feel like your course kind of gave me confidence that, oh, I'm one of these guys too. And I can think in interesting ways and bring thoughtful things to the table. And I think that really kind of set me up for success in the corporate world to be able to feel confident and have a seat at the table.«

Sage, then shared how creativity is connected to her self-identity by saying

44 Glăveanu, Vlad P. Chapter 7 – »The Creative Self in Dialogue.« In *The Creative Self: Effect of Beliefs, Self-Efficacy, Mindset, and Identity*, 117–135. Edited by Karwowski, Maciej; Kaufman, James C., (Explorations in Creativity Research) San Diego, CA, US: Elsevier Academic Press, 2017. Kindle Edition.

»Well, I think creativity is connected to who I am. I mean, I grew up thinking it was, again, more of the tactical expression, but I think as I've matured and definitely post the course, I've realized how creativity and creative thinking can really come through in all aspects of life.«

Creative self-identity as a concept that is achieved by being creative as well as [being] a creative human being also corresponds with several sub-topics such as creative agency, creative confidence, self-efficacy. Additionally, self-expression and creative mindset, as well as understanding creativity as a powerful tool, skill and muscle that requires regular practice, fine-tuning that potentially leads to mastery are themes that emerged from the data analysis within the context of creative self-identity.

Jason (5-6 years) summarized his creative confidence with his ability to present his ideas while knowing that he learned how to think in the course and that he is able and confident to tell others about that, as he pointed out how his confidence grew because of the course as he said

»I am not afraid to do things out of the box. And I think that that is something that a lot of people [are afraid of], it's scary, especially in business.«

Timothy (7-8 years) stated that he gained confidence as he said

»[The course] it's given me a newfound confidence in myself that I can believe and challenge myself in my personal life.«

Claire (5-6 years) illustrated how the confidence she gained throughout the course impacted her professional life after the course, as she elaborates on some changes she added into her life after the course

»I feel like I, I also became a little bit more confident through the class. I felt like I had an upper hand compared to people who haven't taken the class because I felt like I had a great way of approaching things or a good start to approaching things. So, I did feel more confident when I was

interviewing for my current role. I knew exactly what I was looking for this time around through trial and error. And I knew I didn't want to sacrifice what I knew I wanted. I had a bit more confidence that translated into my professional life.»

In the following, Claire (5-6 years) pointed out the ability to see things differently, recognize creativity and to have the confidence of doing creative things oneself rather than leaving the creative parts to the artists, as she said

»I think that it just brings to light that there's so many ways to be creative, and I think people look at it as one singular, traditional route of creativity, and that's the arts. And I think that if they took a course like this, it would just kind of wire their brain to spark something in them and also inspire them to maybe try something they wouldn't try if they hadn't taken this course. It's just like, this course inspires you to try something new, I would say. Whereas a lot of people are very comfortable in routine.»

Valerie (5-6 years) expressed that she values particularly the creative confidence she gained throughout the course, and pointed out

»I would say strengths, one, probably confidence. There's more ways of thinking. It breeds that confidence. And when you have that confidence, I don't want to say it's easier, but things can be, you're more bound to take some risks or think differently because you have a confidence behind you. So, I would say that would be one thing that I would find with this. But my strengths related to the creativity part because like I said, I've always been more of a problem solver and not shied away from that. But now I'm like, okay, there is a method to this. There is a formula so to speak, that kind of gives you that confidence there.»

The above examples demonstrate that the course helped build a strong creative confidence and a belief that, despite previously held thoughts, opin-

ions, perceptions or internal and external judgment, the creative abilities lie within ourselves that are being awoken during the course. This new confidence is connected to an increased ability to express oneself, engage in creative activities and being creative as well as exist as a creative human being just by being and thinking, which ultimately leads to a strong creative self-identity.

In the following section, we will explore how the creative confidence and creative self-identity combined with the conscious self, while applying metacognition and awareness, relate to the creative process.

THEME 3: THE SELF AS PROCESS – CREATIVE PROCESS

»I always have to remind myself that this creative process doesn't come easy to everyone, because it comes so easy to me now because I've taken this course.« Katherine (1-2 years)

One of the key aspects of the creative thinking course is the introduction of the creative process and the exposure of several models of the creative process that have been established by Guilford, Wallas, Amabile, Young, Mednick and Osborn Parnes, as well as other creativity researchers and experts.⁴⁵ All creative process models incorporate various phases from the early steps of preparation, incubation, problem identification to ideation, illumination and production of ideas.⁴⁶ During the course, students explore and apply these various creative processes as well as design thinking during individual and group assignments and exercises. The creative process in combination with

45 Vogel, Thomas. *Breakthrough Thinking: A Guide to Creative Thinking and Idea Generation*. 1st ed. Cincinnati, Ohio: How Books, 2014.

46 Kaufman, James C., and Vlad P. Glăveanu. Chapter 2 - »A Review of Creativity Theories: What Questions Are We Trying to Answer?« In *The Cambridge Handbook of Creativity*, edited by James C. Kaufman and Robert J. Sternberg, 2nd ed., 27–43. Cambridge University Press, 2019. <https://doi.org/10.1017/9781316979839.004>.

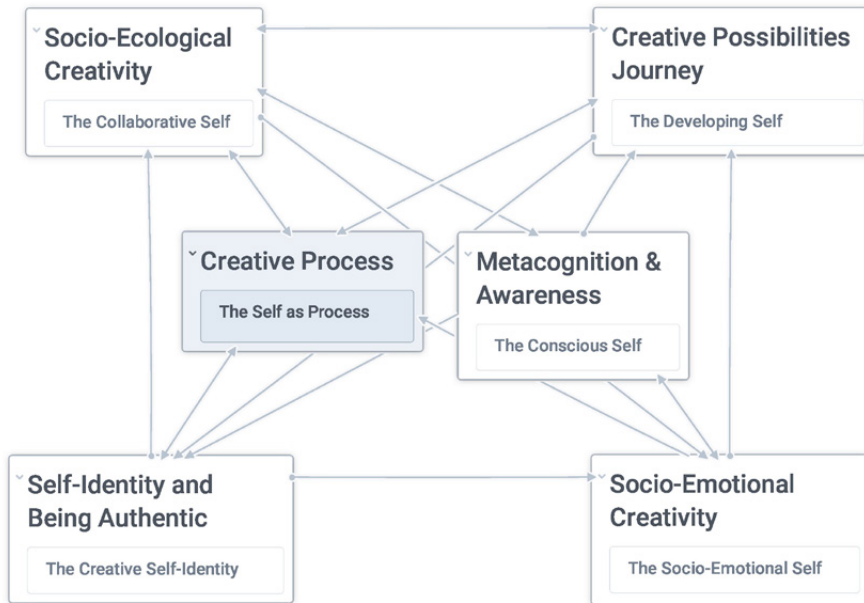


Figure 5-5. The C-SPECD Framework illustrating Six Dimensions of Creative Literacy – Systems Model – 1.

divergent and convergent thinking represents a key concept that students get exposed to during the creative thinking course and the majority of participants shared that after the course, they have been able to generate more ideas before deciding on the final one.

The data analysis brought to light that although all participants spoke about the creative process, only a few described and held on to one or two particular methods or models they had been exposed to during the course. The majority of participants spoke about that they all use a creative process in their personal and professional life, and that their process is highly personal and individual. While all participants were exposed to numerous creative processes during the training, the majority of participants did not follow one singular model but internalized and personalized various components of the creative process models resulting in an individual approach to applying the key concepts anchored in the creative process. This highlights further that creativity is very complex and inter-connected with several key topics that act in relationship. As all six components of the C-SPECD framework constantly affect each other in different ways, for example in terms of duration and in-

tensity, it appears that the creative process plays a more stable role within the creativity system framework.

The previous section »The Conscious Self - Metacognition and Awareness« provided a glimpse that an increased and improved metacognition and awareness helps participants become aware of the thinking processes, their creative processes and the different steps their processes consist of. The data analysis exposed that the creative process represents one of the key learning outcomes that participants can put into action and see tangible results during and after the course. The creative process is associated with knowing the individual steps involved in problem solving, e.g. incubation, ideation, evaluation, decision-making, as well as the act of turning ideas into creative productions.⁴⁷

Charles (9-10 years) reflected on the creative process and on divergent thinking by saying

»And I think that it [the creativity course] taught me that there can be a formula and a way to get to creative thinking. And I think part of that is divergent thinking, part of that is creating actionable insights by doing your research and doing your homework.«

As the creative process relates to awareness, consciousness and metacognition, participants acknowledged that the creative process in combination with metacognition is associated with mental work. The awareness of the creative process allows us to iterate and to reconsider if the ideas we develop and put into action will truly solve the problem at task or be suitable for whatever challenge or project we are working at. The process allows us to apply divergent and convergent thinking throughout the various steps of the process and to pivot when necessary and decide to go back and iterate, change direction or doing something differently.

Jason (5-6 years) alluded to this by saying

⁴⁷ Kaufman, James C., and Vlad P. Glăveanu. Chapter 2 - »A Review of Creativity Theories: What Questions Are We Trying to Answer?« In *The Cambridge Handbook of Creativity*, edited by James C. Kaufman and Robert J. Sternberg, 2nd ed., 27–43. Cambridge University Press, 2019. <https://doi.org/10.1017/9781316979839.004>.

»Definitely the creative process. Something that is mentally exhausting. It's going to be hard because it's like I'm trying to relate to something. It's like recipe development, here we go, me talking about cooking again, but it's like you can't just do it one way. There are so many ways to be creative as we talk about, there's so many limitations we can set on ourselves. So, to think that there is one good way to do it is completely erroneous in my opinion. There needs to be rigor involved. You need to be applying yourself mentally at every step. And it's really hard because it's so easy to go back to like, it's going to work like this. And sometimes we need to do that based on work restrictions, time restrictions. It's not always going to be perfect, but if this is a passion project you have and you want it to be the best, you have to go back and keep reiterating over and over again and sometimes it gets a little bit better.«

DIVERGENT THINKING

The concept of divergent and convergent thinking and the ability to come up with many ideas before converging and selecting the most appropriate and best idea is another salient theme the data analysis brought to light and that is associated with some key take-aways associated with and related to the creative process. Many participants shared their personal and professional examples that illustrate how this concept of thinking of 100 ideas has been implemented and has been used since the course.

Katherine (1-2 years) shared

»I will always remember that it's so much better to have a hundred ideas, a hundred bad ideas compared to, say, 10 small really good ideas, because it just helps me understand the whole leading up to get there and having... You can't really have the really good ideas without having the bad ideas. I think that was the one thing that I really took away from the course.«

Kavya (1-2 years) spoke about how this concept of 100 ideas helps her in her professional work when ideating with colleagues as she said

»So, my team of 5, under the age of 25, I told them the hundred ideas thing from class because basically we are currently going through a re-brand and we had to come up with a name. We have a document of, I don't even know how many names are in that. And we got our one idea from that list. So, it is something that I use and that I took with me from class. And it's something that I do genuinely think helped and they actually think it helped as well. And yeah, it was successful, we came up with a name.«

Emma (1-2 years) spoke about how she adopted the 100 ideas concept from class and uses divergent thinking in her life as she said

»I've adopted the 100 drafts before you arrive at the final. I do that all the time now. I think I don't settle on an idea until I've tried and pursued at least 10 other ideas, and I think that's helped a lot. Trying to think too, what else? I don't know, I guess I just find myself trying to optimize rather than just generate. And I think that's something that's changed, conceptualize more than just trying to spit out something creative. And I think I could say that that's from the course.«

Ken (3-4 years) shared how he uses the hundred different ideas technique in his personal and professional setting as she 'aid

»So I'm able basically just to take techniques that I feel like I learned in your class, whether that's taking out my notebook and writing down a hundred different ways that we could approach this problem that a client has come to us, or if it's just going out and taking a walk before I start thinking if it's putting on music that I feel like is going to help me tap into whatever area of creativity I need to tap into. Just little techniques like that where you wouldn't learn that other places unless you went out of your way to learn about it. So, I feel like just having that class built in that just led to a long-term benefit for me personally.«

He continued by saying

»Basically, we do brainstorming, I'd say probably weekly, whether it's for incoming projects or projects that we are currently working on. So, we learned about brainstorming in your class, so then being able to participate in them, I am able to bring certain things to them. I feel like I've been able to vocalize where brainstorming isn't working. I've been able to take the structure of a brainstorm that is in our agency already and tweak it to how I would like to run a brainstorm and try to encourage people to participate in a way that they're not as accustomed to. And then just learning what works and what doesn't work in a brainstorm. So yeah, I've been able to basically throw those brainstorming, I'm able to go in every single week and show my creativity to people I wouldn't normally interact with at the company in a day-to-day level.«

Anna (5-6 years) also pointed out the ability to distinguish divergent from convergent thinking and to use divergent thinking for expanded idea generation. She said

»I feel like the convergent thinking, which is really pointing toward solving a problem that was the most natural way that I usually defer to and divergent thinking, oh, it happened when I'm really, really stuck and I have no other ways of solving that problem with the first. But now having the terms and understanding the benefits of different ways of thinking, it helps me be more strategic in when I go use convergent thinking and when I use divergent thinking so that I can bring the benefits of those different types of thinking without wasting resources or without waiting until the last minute when I have other resources to switch on type of that mode of thinking.«

Sage (9-10 years) referred to how the course enabled her to learn and practice specific tools related to the creative process and to thinking tools that she had practiced during the course that she has held onto and is still using many years after having completed the course as she said

»I do still really enjoy the brainstorming techniques that we had. I remember we did something with, it was freeform words everywhere. It was about not taking notes in such a traditional way. Definitely. I mean, I'm looking at my desk here, I've got crazy post-its with drawings and another notebook. So, I definitely like to do that kind of more free flowing thinking exercise for myself when I'm trying to solve a problem. And even now that I'm a manager, I feel like I've been able to kind of work through some of those techniques with my team as well of, you don't have to have the answer right at the start. You can kind of explore things, go down different directions, figure out there might be things that are connected that you're not even realizing. And I remember doing that sort of stuff in your course.«

Adam (9-10 years) shared that he applies his creative process in a professional setting and that his process consists of multiple phases, is iterative and that creating a relaxing atmosphere and collaborating with others is an important aspect for his creative process to be successful as he pointed out

»So, kind of the first step is seeing, okay, what is the problem? What is the task that I must complete? Then as I mentioned, there's some research for me that I'll usually want to do, see what's been done before, what hasn't been done before. There's some staring at a blank page for sure. Then brainstorming, working with other people in my department or that I trust to talk about it, voice some thoughts rather than keeping them in your head or at least writing them down on paper so that they feel more real. You can then iterate on that thing, write more about it, make it a few paragraphs instead of a sentence and say, does this idea have legs or is it a seed that can't be watered into something impressive? Then from there it's flushing out further and then constant iteration until it becomes a real thing.« He adds »I think the best brainstorms are the relaxed ones with people you trust where there are no rules and it is just let's talk and let's try to find something that inspires us. So often the best ideas will just come to me in the shower or driving to work too. So sometimes it is that just solitary, there is a puzzle in the back of your brain that you're slowly working on assembling, and when you find that last piece in your brain can just happen randomly and that is a great feeling as well.«

Recognizing thinking as a non-linear process that allows for a more independent and a less restrictive thinking, and that enables one to »jump around« in their thinking instead of applying a linear process that is focused only on achieving a specific goal or end result, is another theme that emerged from the data analysis. Emma (1-2 years) described how she realized during the course that creative thinking and problem solving was a nonlinear process, a concept unfamiliar to her. While she experienced the creative problem-solving process during the creativity course, she also learned about divergent and convergent thinking.

After completing the course, she has applied and practiced a creative process in her professional and personal life and it has helped her to go further when working on a challenge and to create more possible ideas compared to before the course. In her professional environment, she realized that not everyone is aware of their individual process and that she is spreading the word and helping others find their creative process and learn about the various steps that are part of the process. Emma (1-2 years) explained

»Well, so I used to think conceptualizing was linear, and now I'm realizing more and more in my role and in my day-to-day, that conceptualizing can be more of a circle and more of a process. I think that's something that's changed a lot. And jumping around to different points. The creative process not being something that you have to follow but points you can jump around on. My thinking has changed a lot in that aspect.«

She then spoke about the importance of adding time to reflect and thinking deeply into the process in order to get better results. She describes

»I guess the last part too, which is the hardest part, is dedicating that time and putting time into your schedule for moments that you need to sit down and think deeply. Because again, we live in a society that's like, „Let's go, go, go. Let's keep going.« And there are times that you can take to think deeply, and if they're not included in your schedule, there are ways that you can incorporate blocks that I think would help strengthen your creative skills.«

Juan (7-8 years) connected his creative process with the creativity course by pointing out a multi-dimensionality that appears in non-linear ways as he stated

»It [creativity] allows you to think about the themes and the subjects taught in the course with a multidimensional thought process. Meaning you're capable of interpreting things, not just linearly, but also in other parts of your subconscious. And you start to get ideas or you start to evaluate your ideas and evolve your creative process based on what you've been taught.«

The majority of participants stated that not everyone is familiar with a creative process and might not be familiar with concepts such as divergent and convergent thinking, which provides those who learned, studied and practiced it during and after the course with a viable vantage. Katherine (1-2 years) explained that for her, the creative process represents a competitive advantage as she revealed

»Not everyone knows about their creative thinking process. And I feel like so many people can incorporate that in their day-to-day or just in how they're living life that I'm just always so surprised that other people don't know. So, I always tend to bring it up in all of the conversations that I'm having, even if it's just like, „Maybe you should come up with 20 ideas before you get one.« And so, I'll just kind of put that out in the space. So, I definitely think that other people can be creative that way.«

She added

»I actually am very lucky enough to be in an agency where there are a lot of Emerson alumni, and I know that creativity, especially at Emerson, is really shown. But working with other people that haven't been to Emerson and haven't taken this course, because a lot of the people at my agency actually have taken this course, but I've noticed that the people that haven't been to Emerson or the people that haven't taken this course just think very differently than how I think. And I always forget, and I

always have to remind myself that this creative process doesn't come easy to everyone, because it comes so easy to me now because I've taken this course.»

PROCESS IS INDIVIDUAL

While all participants recognized the power of the creative process, the data analysis additionally uncovered how the creative process is highly individual and part of one's identity, and that it can be adjusted to one's specific needs. As long as one becomes aware of one's thinking and realizes that adding a thinking process to the equation can increase the odds of developing ideas that are original, applicable and relevant to any challenge.

The creative process can act as a tool that improves our thinking and helps us better understand unconscious thought.⁴⁸ The data shows that while a creative process is being appreciated and used as a powerful tool, many participants speak of how the creative process doesn't need to follow one specific guideline but can be adapted and individualized to meet one's individual thinking style, personal and professional situation and can be customized. This is another example that creativity creative thinking is not only complex but depends on many factors tied to the individual human being. While creativity holds universal powers, it becomes an even stronger tool when complemented with individual components of each person.

Participants mentioned several key-take-aways related to the creative process that they have embraced and further developed in their lives, the data also illuminated that creativity is highly individual and that everyone can personalize and tailor the learnings. This notion is being supported by the following comment by Charles (9-10 years), as he said

»I honestly think one of the big takeaways from that course for me was that we all have different creative processes. And that we all go about starting a process, and going from start to finish very differently. And for

48 Preiss, David D., and Diego Cosmelli. Chapter 17 - »Mind Wandering, Creative Writing, and the Self.« In *The Creative Self: Effect of Beliefs, Self-Efficacy, Mindset, and Identity*, (Explorations in creativity research) by Maciej Karwowski, James C. Kaufman, 2017, 301–313. <https://doi.org/10.1016/B978-0-12-809790-8.00017-0>.

me, as a strategist especially, I remember part of that course was to use divergent thinking, and then move into convergent thinking. And that's something that I always try to remind myself of, because as a strategist, it's really, really important to think broad, think divergently, and to remove bias as much as you possibly can.»

Being knowledgeable and able to apply the creative process at the individual level provides another key advantage, as this process knowledge can be applied in teams and when collaborating with others. The collaborative process then can guide a very collaborative and interactive tool. Katherine (1-2 years) reflected on creativity within the context of collaborating with others and mentioned that not everybody is familiar with their own creative thinking process and that she recognizes the possibility of training more individuals in creativity, creative thinking and creative process, and providing more people with the beneficial tools that a creative thinking course can provide. She explained

»I've thought about it [creative process] this morning when I was with my roommate, that I'm so surprised that no one knows what their creative thinking process is. I have ingrained that so much in my head that it's surprising to me that other people haven't gone through this process and don't know what this process means to me. And so, when I'm talking about creativity, I always talk about my thought process and what's going through my head. And then there are people that I'm having conversations with are always like, „What are you talking about? I have no idea what you're talking about.» And to me, that's just so normal, because I've normalized that in my life. But I think for others, creativity can go so far.«

Stacey (7–8 years) elaborated on the fact that creativity and the creative process can be applied in professional settings where every individual can add value as she stated

»And I can't stress enough the importance of the words professional creativity because it wasn't an art elective [course] because I've taken those,

it was a professional, to me, my interpretation of it was, it was how can you be? What is your creative professional process? What does that muscle look like for you? And mine was different than Salvador's was than everyone in that class. So, I think that's how I would describe the importance and significance of that creative professional muscle.«

Stacey learned that the process allows for diversion, divergence, convergence and pauses, and that this process is highly individual, as she pointed out

»I was surprised by my creative process because it was a lot more spontaneous than the other things that I do professionally, personally, and academically. I like to be over-prepared. I don't wait for a spark. I create the spark, I create the energy, I do the work to get the results that I need. But in the creative context, it was more so a process of creating the environment with which to spark the creative answer. And I thought that was very interesting because I was used to muffling my way intellectually through tasks.«

Stacey added that learning about the creative process at the individual level was one of her key take-away from the course

»I think trusting in your own creative process, and you don't arrive at your own creative process right away. I think that there are kind of breadcrumbs that you need to follow to understand how you operate.«

CREATIVE PROCESS AND CREATIVE COLLABORATION

Denise (7-8 years) described how the creative process that she learned from the course also enables her to tap into her co-workers' individual processes and to 'moderate' everyone's process for a common project goal. She described some positive changes that have occurred after the course in her professional life and pointed out

»I will say the way it [the course] impacts my work today is that everyone on my team thinks and works differently. And I'm always really curious about what their process for ideating and bringing things to life looks like. They're all very different. Some people are just, they're kind of more, I guess, traditional artsy. Some people are just kind of more structured with the way they like to create. And so, I'm always really curious and ask a lot of questions about what their process looks like so that I can figure out, okay, how does this work in a team context? How can we all work together and understand each other and really build something where we're all doing work that plays with our strengths?»

The knowledge about the creative process and everyone's individual creativity impacts how teams work together and how common goals can be achieved and problems can be solved. This connects to the ability to be more empathetic, a theme that will be explored further in Section 4 – Socio-Emotional Creativity and The Socio-Emotional Self.

When asked about if there is anything else that stood out in the course, Anna (5-6 years) pointed out her own creative process and the realization that other individuals had their own personal process. That insight has provided her with the ability to check in with her teammates at work and to provide each coworker with the necessary space and time to apply their personal processes instead of buying into one uniformed process that might squash certain individuals and possibly valuable ideas or insights. She said

»I thought it really stood out to me that the creative journey is different from one another. People go at different paces, and it is really personal that I shouldn't judge the pace of other people going through their creative journeys. Another thing that stood out to me was that I was about the creative process. My creative process is that I bubble around. I use mind maps, but then also have different ideas, and I just want to pin the ideas in a bit giant whiteboard and find a way to connect them.«

She continued by saying

»So that stood out to me a lot, that the creative process, we all know the phases of the creative process. You have ideation and then you have incubation and you execute at the end, but it may look very different from one person to another. And that, I bear that in mind coming into my work even today, that people, a lot of people want to be in together in a room for an all-hand session or just for a workshop. People like workshopping that put their mind together and try to top out the ideas and try to come up with a solution. But I tend to shy away from those kinds of sessions, and I want to give people their own space to go through their own processes. I always remember that goal. Sometimes people just need to be alone in their own space to incubate and to marinate the ideas and come up with something concrete. So that is definitely an incident that stood out and I carried it with me until today.«

The creative process allows everyone to move out of the auto-pilot thinking modality and to embrace a process where challenges, problems and situations are being ‘worked’ on instead of being reactive towards those. The creative process empowers humans to ideate, to find additional information, to question, to diverge, to converge before making a final decision. It allows for more thoughtfulness and being more intentional.

Charles (9-10 years) illustrated how he invites his clients and collaborators to apply the divergent thinking skill when working on projects, and he said that while his clients might not be familiar with the divergent thinking concept and that they question or sometimes challenge it, typically, this technique leads to better ideas and better thinking as he stated

»I have brought [the creative process and divergent thinking] to a lot of other people and shown people as a way to, either be a warmup for a brainstorm and get people thinking really out of the box, so to speak, or to be a creative exercise in actual ideation of, well, »a client has told us that they want this, what are all the different ways that we could possibly interpret that?«

Charles then described that although he encourages his clients to apply divergent thinking and a creative process, his clients often do not understand the

reason for using a creative process and divergent thinking and that he has to educate them and build trust. When his clients ask him where he is taking them, he tells them that the process will lead to better outcomes, as he shared

»I promise you, I'm taking you somewhere interesting, if you can just follow along here. And what I've found is that when people do follow along, it gets to better thinking and better creative.«

When asked about the feelings and emotions he associates with the creativity course, Timothy (7-8 years) connected the creative process to his personal life as well as to his professional work. He explained that the creative process is highly valuable as he collaborates with many experts from different disciplines and domain knowledge. He pointed out that at his company, the creative process is highly appreciated and considered more important than only domain knowledge. He considered the combination of creative skills paired with domain knowledge as an important success factor in his career so far. Timothy described how the creative process made an important impression on him that he has held on to and further developed since the course, as he described

»And I think that was really the foundation of then, okay, how do I bring myself up to a level and understand different ways of thinking, whether it was Osborne and Parnes, whether it was looking at the ideation process, how could I apply all of that myself? And at the time it was excitement, but it was also quite daunting and not understanding that everyone has this power within them, it's about training that part of your brain to use it to its full potential.«

He then continued and illustrated how he uses the creative process in his professional setting and how the process knowledge allows him to demonstrate to his employer how he thinks and how he approaches problems, a skill that in his company, a leading international consumer packaged goods company, is highly regarded and considered more important than the degree he holds. He explained

»I think there is a perception that your degree and what you come out with, whether it be chemical engineering or whatever it might be, is the most important thing to an employer. But the employers really do look at your creative problem-solving skills are so key and how you apply process, how you lead. And the skills that I harness from that [creativity] course have been incredibly important in displaying how I define problem solving and how I overcome issues within my professional career. And it all goes back to the giving examples, citing, okay, what did you do in the fact-finding process? I always go back to fact finding, idea finding and solution finding. And that forms the framework for whenever I am faced with a problem that I will use and really look to demonstrate those skills and demonstrate especially to my colleagues and also my employer, how I am really harnessing those skills to better the company and also better myself.«

THEME 4: THE SOCIO-EMOTIONAL SELF – SOCIO-EMOTIONAL CREATIVITY

»I feel like when I actively realize I'm being creative, that's when I'm at my happiest.« Sage (9-10 years)

The previous three sections The Creative Self-Identity, The Conscious Self and The Process Self demonstrated how intertwined the take-aways from the course are and how the participants built their creative thinking skills and developed their creativity based on these foundational aspects. This formation of a triad provides the foundation to further investigate how three additional subjects emerged through the data analysis – The Socio-Emotional Self, The Collaborative Self and The Developing Self, which we will further investigate in the next three sections.

Once the participants established their own creative self-identity (The Creative Self) that has been built on a strong belief and a creative confidence, the identity is being strengthened and empowered with the awareness, metacognition and consciousness how the self, the inside world and the outside

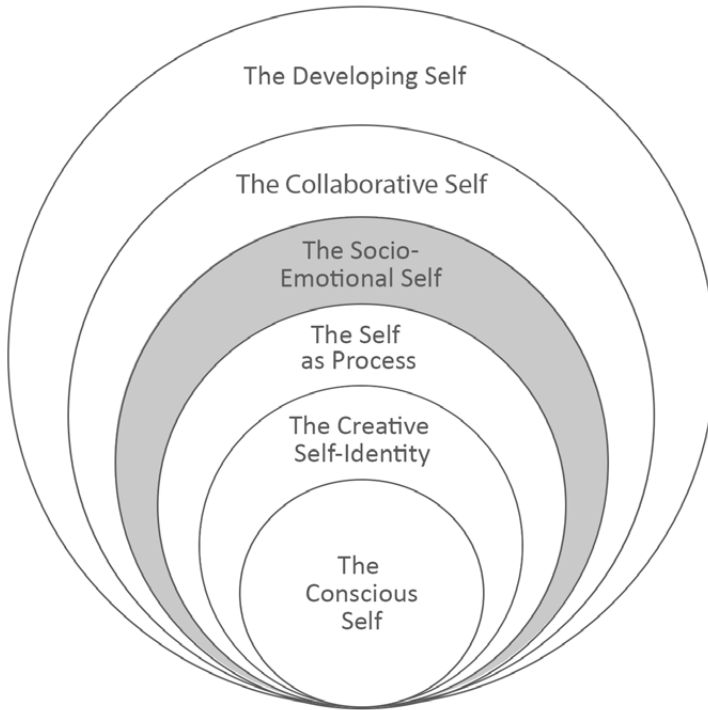


Figure 5-6. The C-SPECD Framework illustrating Six Dimensions of Creative Literacy – Circular Model. Illustration by Alexandra Vogel

world interrelate and build various interconnected relationships. This cognitive awareness is then supported by the acquired understanding that one does not always need to rely on auto-pilot thinking and rush to the solution of any given problems, but instead, taking time, reflecting, applying and following a creative process also known as a creative problem-solving process that allows for a more complex and systematic approach to dealing and interacting with the world.

Participants reported that the first three themes helped them become more aware to tap into the emotional side of others and themselves and to realize that creativity, creative thinking and problem solving requires mental strength and can be challenging at times and that one needs to break away and rest in order to find a balance with the ebb and flow of creative thinking. Adding balance into one's life and becoming aware of one's emotional self as well as being empathetic towards others is connected to the subjects Creative

Self-Identity, Conscious Self and Process Self, and can be described as Socio-Emotional Creativity. The Socio-Emotional Self is related to socio-emotional learning as well as socio-emotional skills that are of »cognitive, affective and behavioral nature« and relate to self-awareness, social awareness and refer to the awareness of one's own emotions as well as tuning into and sensing how other people that we engage with feel.⁴⁹ Socio-emotional skills allow students during their learning processes to become better learners while in school but also increases the ability to live emotionally rich lives post-graduation as a person continues their life journey outside of educational settings.

Additionally, socio-emotional skills allow humans to develop personal goals and values and help us decide how we reach those in an ethical and socially responsible way.⁵⁰ A close relationship and interaction between the cognitive abilities related to socio-emotional skills and creativity and creative skills have been documented.⁵¹

The data analysis from the interviews highlighted that creativity provides a strong foundation for the development of socio-emotional skills. Participants reported that the course not only sparked their creative identity, increased their awareness and cognitive skills as well as an understanding of the creative process, they also explained that this creativity led to a new or increased empathy for themselves and for others, an aspect that relates to socio-emotional creativity. This emotional awareness heightens and improves how the participants organize their own lives and how they see others.

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50 Piske, Fernanda Hellen Ribeiro, Tania Stoltz, Alberto Rocha, and Cristina Costa-Lobo. 2020. Socio-Emotional Development and Creativity of Gifted Students. 1.a. Imprensa da Universidade de Coimbra. <https://doi.org/10.14195/978-989-26-1770-1>.

51 Nakano, Tatiana De Cassia, Ricardo Primi, and Rauni Jandé Roama Alves. 2021. »Habilidades Do Século XXI: Relações Entre Criatividade e Competências Socioemocionais Em Estudantes Brasileiros.« *Educar Em Revista* 37:e81544. <https://doi.org/10.1590/0104-4060.81544>.

EMPATHY

Emma (1-2 years) explained how her creativity, which she considers one of her best abilities, helps her to be more empathetic and that she became more social because of it. She remarked

»I always think that my creativity has been one of my best abilities, one of my best attributes. I still think that. I'm finding that it interweaves with my other attributions and personality traits. I think I'm able to be a much more empathetic person and I think I'm able to be a much more social person, and much more able to make human connections rather than formal connections. I think that's the part that I really value, especially as a young adult kind of making my way in the world that I could say, „At the end of the day, I'm creative, I'm kind, I am empathetic, and that's good enough.» That is great for this world, I think.«

During the course, the participants not only learned about their own personal creativity but they also experienced their peers' creativity and individual journeys. This combined experience where participants learned about their personal creativity individually but also collectively as they experienced their peers' creativity and how their peers reacted to everyone's creativity led to a greater appreciation and awareness what the other does, thinks, and how they behave. It allowed for an opening to not only see oneself as the central figure of the learning experiences but added the awareness that others might have creative ideas as well, are individuals that might be different but creative as well, and often marked by a creativity that shows up differently from oneself.

When asked about what others value most in her since the completion of the creativity course, Charles (9-10 years) responded

»One of the big words is empathy. And we've talked a lot about empathy in these last several years, and it's really important. And I think it's having empathy for people who are going through their own creative process, and doing things according to the way that they want to do them. And so, working alongside my peers in the course, and seeing the way that they would present an idea, or present an assignment, and un-

derstanding that they may have interpreted something and gone about a solution a bit differently than I have, I think showed me that that's a very real thing that can happen out in the workplace, and in the real world as well.«

Hunter (3-4 years) described how her attitude towards other people changed after the course as she became less judgmental (a topic that will also show up in Section 5 – Socio-Ecological Creativity) as she developed a greater understanding and empathy for others. She described how she became more empathetic by saying

»That definitely changed my perspective, that one person saying, it doesn't have to be art, it can be anything. I was like, oh my gosh, that just blew my brain mind blown. And from then on, I've really taken that seriously. It started to make me realize that some of the communication barriers I have with people are just different ways of thinking, different creativity models. And it's made me really appreciate my coworkers and the people in my life who don't think like me. Not everyone has to think like me to be creative. I don't have to think other people to be creative either. I can just exist in my own space and bring my own level of creativity to the table. And people who are going to value that are people who are able to understand that creativity is not something linear. It grows, it changes, it morphs from project to project, from thing to thing. And not everybody's going to do everything the same way, nor do we have to. That's what makes the experience of being a person so much fun. We don't have to do everything the same ways. We don't have to think the same ways we're allowed to be an individual. So definitely has changed a lot from then to now.«

Jason (5-6 years) spoke about empathy from two perspectives – empathy and appreciation for things and for people combined with the ability to focus on details. He mentioned how being vulnerable and seeing others being vulnerable during the course has led him to becoming more empathetic, as he described

»The things that stand out the most in that course were the vulnerability I put myself through and seeing people go through that. I think that it really made me more empathetic because as we discussed earlier, people don't really see themselves as creative. It's very uncomfortable for a lot of people, especially who are shy or introverted, naturally don't want to show or create waves.«

Xiaomin (1-2 years) described how, since she completed the course, her empathy has shown up when she meets people, may they be friends or strangers and how her awareness and self-awareness paired with her creativity allow her to react differently when engaging in human connections. There is a newly gained ability to gauge situations and other people and to adjust her own thinking and reactions to match what she wants to achieve during a conversation with others. After the course she started to find a »common ground« or similarities when she engages in conversations. She also is aware of and thinks how what she says might impact or affect other people as she described

»When I am making friends or develop other relationship with the new people I've met or the strangers, most of them will think I'm a really interesting and funny person because I always talk to them in an interesting way. I will ask them about how they feel about this course or the professor and maybe some questions, things deeper than just know each other's name. And they will have a nice time when they talk to me. We all have our common topic and they have their interesting things they want to tell me.«

Ivan (9-10 years) described how the course helped him become more aware of his emotions and those of other people and how this skill has become helpful when collaborating with others in his professional settings as he pointed out

»[Creativity] It can really affect your success or your failure and your ability to accept it and learn from it. I definitely had times where I was challenged professionally in ways that upon first being challenged,

I didn't really see it and I didn't really agree with it. But again, the coursework gives you the frame of reference that even if you're emotional or disagree with something in the moment, you can still take inventory of other people's viewpoints and try to make sense of what they saw.»

When asked about »what have you discovered and developed through creativity since the course?«, Mia (3-4 years) considered being empathetic as her »competitive edge« that helps her understand others better and incorporating many more difference, e.g. peoples' skills, backgrounds, ideas etc. into better project teams as she explained

»I feel like there are so many strengths when it comes to having creativity because you understand that you can't shut other people's ideas down. And so, this gives you an empathetic edge. I think you become more empathetic to other people, more open-minded to different kinds of people, different backgrounds, different ideas in general.»

She then added how creativity not only leads to more empathy but additionally, makes her a better human being as she said

»And I think creative thinkers, truly creative thinkers will be open to hearing the other person out and also being emotionally mature to respond in ways that spark the conversation versus argument and blame, pointing fingers, we'd all be better humans if we were a bit more creative. Listen to each other.»

Hana (7-8 years) explained how creativity is essential in her life and helps her deal with disagreements. There is a connection between creativity, empathy and conflict resolution as she explained how her creativity allows her to assess situations and then react in a creative way to achieve an outcome that is beneficial to everyone involved as she explained

»I really feel like creativity is very essential in your life, in everybody's life. Creativity can be soothing for the situation too, because again, when I have a conflict with people, then instead of just react to that right away with my original emotion, I try to think about, I think it's a creativity too. So, think about, oh, how can I deal with this situation? How can I change this situation to be more efficient or beneficial for everybody? Those kind of thinking processes. Also, with the creativity too. So, I think it's essential and very critical to live your life.«

EMPATHY AND CREATIVE COLLABORATION

Timothy (7-8 years) described how creativity and empathy allow him to assess teamwork and the positions other people might have. Instead of just disagreeing and clashing with someone in a confrontational way or being disapproving towards a situation, he described his ability to assess the situation and investigate why the other persons might think or feel a certain way and then take that information into the equation before deciding how to bring everyone along on the path of mutual benefits and opposite project outcome that can benefit everyone and the company. He described

»If you're working within a team or use it [creativity] in a professional environment and you understand that some people do, some people may come into a situation where they have got a very strong opinion, they are very much, okay, this is how I see the situation and this is how we should proceed with it. The creative thinking process really allows you to take it up a level slightly and really question what's impacting that person's feelings, what's impacting the way of thinking, how have they arrived at that solution? And I think it really allows you to ask the important questions of people when you are trying to get to a joint solution as a team. And I think you do really see, you really get to see the people say to me the way that you can conduct yourself and the way that you can ask the right questions at the right time, you can really steer and direct the process of creative thinking. You can bring people along the way as well. It's not a confrontational process, it's very much collaborative and it allows you to bring people on that journey with you.«

He added that this empathy and his ability to bring people along is highly valued by his colleagues in his professional work as he stated

»What people really value about me within my corporate, especially at work is my ability to collaborate and bring people together has been one of the big ones. People find that I do, I am really, I can bring people on a journey with me and I'm not just trying to take every decision by myself, but I bring people along on that journey phase with me and they are on board throughout that process.«

When asked about what value creativity holds in her life, Himani (9-10 years) explained the interconnection and strong relationship between creativity and empathy as she explained

»I mean, I just think [creativity] it's omnipresent. It's an approach. It's like empathy. I kind of put creativity and empathy more and more in the same bucket, and I feel like you can't really do one well without doing the other because ultimately, we're doing all of these things to fulfill a human need and it's either a human need for ourselves or for those around us. And those needs don't change, but how we solution against them does. And in that sense, that's how both creativity and empathy continue to evolve.«

Juan (7-8 years) described how the creativity course helped him become more aware of other people he was interacting with and how he became more considerate of their perspectives and their needs. He described a situation 7 years ago when he worked as a college tour guide and how he incorporated creativity and empathy into how he changed up the way he delivered the tour as he described

»I remember that class made me [empathetic]. I used to give tours at the time. And so, every time you would give a tour, I would always think how I cannot give the same tour every time. I cannot speak to everyone the same time the same way. I have to think about how does this person

want to be spoken to? How can their experience be better? What language are they seeking for? What detail are they seeking for? Are they humorous, are they not? What kind of humor do they like?»

This again illustrates how the creativity training influenced participants' ability to reflect, apply awareness and self-awareness and use creativity as a tool for increasing and improving empathy leading towards a greater understanding and acceptance of others. Additionally, creativity training seems to positively affect a »notion of openness to difference« that represents an ability to recognize different perspectives amongst people and consider those as something valuable that, particularly in the context of creativity, typically are considered as a positive trait. While one does not have to agree with everyone and other people's different opinions, understanding the why and how others are different can be helpful.⁵²

DEFERRING JUDGMENT

Being non-judgmental or less judgmental emerged as another key attribute stemming from creativity training and emerged as an important element of The Socio-Emotional Self and Socio- Emotional Creativity and provides a strong foundation for creative literacy. Developing empathy for other people is closely connected and related with a heightened awareness and the emotional ability to put ourselves in the shoes of someone else. To be able to take on the perspective of the other and to think what, why and how others react without classifying or judging those actions. The ability of deferring judgment is related to the ability to know oneself and to be in touch with our inner world and to consider how others might feel.

The data analysis showed that learning and practicing a creative process and particularly, becoming more familiar and confident with divergent and convergent thinking helps develop the ability to defer judgment during the brainstorming and idea developing phase in order to reach a maximum num-

⁵² Glăveanu, Vlad Petre. *The Possible: A Sociocultural Theory*. New York, NY: Oxford University Press, 2021.

ber of ideas. Additionally, the process knowledge and the distinction between divergent and convergent thinking improved the ability to defer judgment towards other people, situations and circumstances.

The following statement by Anna (5-6 years) illustrated how this shift takes place over the course of the 14 weeks of reexperiencing creativity in the class setting as she pointed out

»I am thinking back. I think one of the things that stood out in my mind is that at the beginning of the course, there were some exercises that required us to tell a story about ourselves or something like that with different medium. And I was listening to some of the people who chose to tell the story verbally in a plain old storytelling fashion. And I thought to myself that this is not really what is being asked in the assignment. This is not the requirements. You are doing it wrong. And I thought that I was doing it right and people were doing it wrong. But then as I went through the course first, I see how people change a lot starting with a plain traditional storytelling in the beginning. And by the end they are coming up with all the different ideas of how to tell the same stories. I was witnessing all of that, and I thought it really stood out to me that the creative journey is different from one another. People go at different paces, and it is really personal that I shouldn't judge the pace of other people going through their creative journeys.«

IN THE GRAY

The data showed that deferring judgment becomes an ability that is closely related to building empathy, and while being empathetic and more open towards other people, being less judgmental towards one self and towards other people was mentioned by the majority of participants. Being less judgmental then leads to the ability to see life and people in a more nuanced way and to think in other terms than »binary« and »black and white«. This capacity involves looking at things and situations from different angles, being empathetic for opposite sides and considering multiple perspectives as potential truths, leading to a moment of being 'in the gray«.

Manuel (9-10 years) takes the concept of empathy a bit further as he describes how creativity and empathy as well as the ability to step back and see the bigger picture have allowed him to become less »binary,« and less »black and white« as he described

»Not looking at things as binary shows up a lot in my values or in my day-to-day kind of practice or in my way sometimes of looking at problems or identifying problems of how other people are tackling things. Sometimes even societal things in the political landscape that we're in now, just how people look at very macro issues sometimes with very black and white. And I can take a step back and say, well, it's not necessarily all white and all black. There's probably a mix of the both, and somewhere in the middle, I find myself being always that contrarian person that doesn't pick one side or the other. I can see the value in both sides of a solution or an ideology or an issue in general. I can find the goods in both sides and say, well, I think it's somewhere here in the middle, but I oftentimes find myself being that guy that can debate both sides and can both agree with both sides. I can just be somewhere in the middle.«

Denise (7-8 years) brought up the ability to see other people for what they are and that people sometimes don't accept themselves, but that creativity allows her to see value in anyone. She appreciates her own creativity and developed the ability to be empathetic and to see positive aspects in almost everything and everyone. This ability is paired with the ability to defer judgement, which is related to being empathetic. If one can be empathetic, one is able to defer or withhold judgment. Denise described this phenomenon by saying

»I don't have their internal recollection of memories. I don't have their particular set of traumas and I am just not them. So, I'm able to see them I guess from an objective point of view. But even within that, going back to the non-judgmental piece, it's kind of like, well if their creativity shows up in this way, that works for them and I'm happy for them. So, it's kind of not judging the way that they're expressing their creativity.

I've seen so many ways that people create that I've never even imagined to be a thing, and it's just really beautiful to see the range of expression of creativity and the way that people's brains work. And it's all just interesting. We're all human at the end of the day, but it's the way that it shows up for everyone is very different.»

Denise then added the aspect that her increased openness and empathy towards others have allowed her to be more empathetic and less judgmental towards herself as she explained

»And just being open-minded about not just the connections that I can make with other people, but just even what my own journey looks and what creativity looks like for me. I am even being a bit more open-minded and accepting of my own transformation with how my creativity shows up. I feel like I got to the point where I was open-minded with others, but there was still maybe a bit of judgment within myself and how I showed up and how my expression of creativity showed up. And now it's like there's a releasing of that judgment for myself.»

Sadie (5-6 years) spoke about some changes that occurred after the course and her realization that she was quite judgmental and opinionated before the course. She described how the course experience helped her adjust her perspective on people, things and situations and that she is now able to defer judgment and be more accepting. In the following sequence, she describes how she has become less judgmental and how this allowed her to become more empathetic, as she pointed out

»Instead of being like, this person likes this, well, that's stupid. I don't like that. It's more like they like it for whatever reason. And if we have a conversation about it with my friend, why do you enjoy photography? Oh, it meant a lot to her grandfather or something. It's like, oh, that's really cool. There are times in college where I bickered back and forth with my parents about certain things and now, I go, oh, okay. That's their view. I see their point of view where they're coming from. I don't agree with it,

but cool, they can have that. Everyone is entitled to their own opinion. And me being on my soapbox and a bitch about it isn't going to do anything. That's not going to change anyone's mind. It's just going to irritate me even more and make me look like a [expletive]. And I don't want to look like a bad person or a pushover. It's more just like, this is not worth my energy anymore. So yeah, definitely a lot of changes.»

BALANCE AND CREATIVE PAUSE

Emotions, Self-Care, Happiness, Mindfulness are additional salient themes that have emerged from the data analysis and are related to the Socio-Emotional Self and to Socio-Emotional Creativity. The course made the participants in the study more aware and conscious in general but also opened up a window to their inner world. The majority of participants mentioned the concept of »ebb and flow« and explained that they experience their creativity in waves and that it is difficult to ride on top of the wave all the time, since creativity takes energy and that the creative thinking, which is an activity that requires mental resources, can be hard or even exhausting at times. This realization led to the need of taking time away from the thinking, adding some recovery phase and engaging in rejuvenating and re-energizing activities such as nature walks, mediation, artistic projects or just doing nothing and allowing being bored. From the perspective of the creative process, this creative pause has been identified and described by creativity researchers as »incubation«, a time when the subconsciousness is at work and processes the ideas and the challenges the brain has been actively engaged, making cross references, and often, leading to an »Aha-Effect«, a »lightbulb«, when the creative solution emerges. Additionally, the creative pause mentioned by participants represents taking a break from the mentally exhausting or difficult task to constantly and always be aware, conscious and think about and from multiple perspectives and consider numerous potential outcomes. In the latter, case, participants, who identify themselves as creatives and who engage in creative work, take a conscious »time out« and allow the body and mind to come to rest and get recharged. One aspect of the pause helps rest the mind and regain some energy and a second aspect represents the incubation period, allowing the mind to take a break from the task at hand and allow the sub-

consciousness to digest and breathe. Balance plays an important role when being creative as it provides an equilibrium between conscious and unconscious thinking as well as between being rigid and having too much structure and having no or very little structure.⁵³

All participants stated that the course made them more aware and conscious in general but also opened up a window to their inner world and that engaging in creative activities and being creative is associated with positive emotions. Practicing one's personal creativity and engaging in regular creative activities seems to have a positive effect on the mindset and on the emotional state of the self. Additionally, the concept 'flow' emerged as a sub topic as participants associated creativity and creative activities with flow, a state of mind during which one fully engages with a subject, activities or a state of being present and letting go of everything else.⁵⁴

Alice (3-4 years) shared that

»My creativity ebbs and flows, but eventually I always get a craving to do something fun and cool, and ultimately something that's for me and my mind and my thoughts and for my expression. So, then I get into those moments of really trying to create different things or just, I dunno, just try new activities.«

CREATIVE SELF CARE

Darika (7-8 years) described that she requires time to be by herself and to step away from the challenge or project she is working on and to allow her brain to take in different information. She mentioned

»I think sitting back and being with yourself allows you to discover maybe talents that you had, allows you to sit with your thoughts and allows

53 Ivcevic, Zorana, and Emily C. Nusbaum. Chapter 20 – »From Having an Idea to Doing Something with It: Self-Regulation for Creativity.« In *The Creative Self: Effect of Beliefs, Self-Efficacy, Mindset, and Identity*, 343–365. Explorations in Creativity Research. San Diego, CA, US: Elsevier Academic Press, 2017. <https://doi.org/10.1016/B978-0-12-809790-8.00020-0>.

54 Csikszentmihalyi, Mihaly. 2010. *Creativity: Flow and the Psychology of Discovery and Invention*. New York: Harper.

you to pay attention to your thoughts that come up. I think that's a very important thing. Like I was saying, if you don't have the ability to recognize an idea, that idea will come and go 20 times, but you're never going to do anything about it. And I think that's related to sitting with yourself, sitting quietly. I think the second thing that is very important is to do things that you enjoy because when you are doing things that you enjoy, you are in a state of flow. And when you're in a state of flow is when you can be creative because you're not shutting down ideas. So, I think a combination of these two things, because when you're in a state of flow, you're getting the ideas, plus you have the ability to recognize that idea. I think that's where you can make magic happen. So, I would say maybe alone time and taking time out to do things you love. So, whether that's reading, whether that's running, whether that's whenever you feel like time goes by or you didn't realize where few hours have gone, it's like a meditative state and you're so engrossed in something. I think your brain needs that. Your brain needs to turn off everything and just focus on one thing without really focusing on it. And then that's when you get the best ideas, and that's where you can then explore your creativity.»

Darika (7-8 years) added that »time alone« has become a ritual and a tool for her to connect with herself, allow her to regain her creative energy. She describes the two sides of the creative pause and mentioned incubation as well as a break from the mental work required by creative thinking, as she pointed out

»I think I was saying I think it's something that I now feel is very much a part of me, which is something that I couldn't really do earlier. I always felt it was outside and it was someone else's job to be creative. So, I think that is something that I begin to associate myself with. I also think that you need, at least for me, I need that time alone to really be able to be creative and to continue to be creative because I feel like when there's too much going on and you're trying to come up with ideas, and like I said earlier, it's supposed to be effortless. So, when you're putting in a lot of effort in trying to come up with something, I've realized, at least for me, it doesn't happen. So usually if I take a walk or you're in the shower, it's

like when you're not thinking about it is when my best ideas in the most unassuming way.«

Denise (7-8 years) described how she steps out of her routine when she is getting creatively stuck and how going on an artist date, a concept developed by Julia Cameron in her book »The Artist's Way« and covered extensively during the course has become a stable activity for many participants in the study.⁵⁵ She described

»When I get into creative ruts where I feel as if I'm stuck, I like to pull myself out and be like, okay, maybe this is a moment for me to, instead of trying to force myself to create, to look around me and kind of almost take myself on these artist dates or just solo dates or even just moments of rest to allow myself to see what around me can inspire me to create. And so, I find that when I'm struggling with creativity or when I'm struggling to find what I want to bring to life, when I just go into a moment of pause or rest or going on these artist dates, and for me, a lot of my artist states are specifically at coffee shops. I find myself really inspired when I go to coffee shops and I'll take a book and I'll read, or sometimes I just go and get a coffee and I'll just sit in, people watch or even just have random conversations with the barista and the strangers around me.«

Manuel (9-10 years) associated »moments of pause« with being kind to himself and allowing himself to take a break. He described how he practices »moments of pause« when he is on a flight during a business trip or when he engages in mini creativity exercises during work as he described

»And so, I try to be super open and kind to myself to have those moments of pause, whether it's intentional or not, and just be super open. I recently was talking to somebody about this too, of appreciating when you're on a flight and you don't have wifi and there's no screen entertainment on

55 Cameron, Julia. *The Artist's Way: A Spiritual Path to Higher Creativity*. 25th anniversary edition. New York, New York: TarcherPeregrine, 2016.

the screen, normally it can sound like a nightmare, and sometimes it definitely feels like that. But then, leaning in, okay, what happens when you're just left there with your thoughts? There's nothing and what can come out of that? And I've had wonderful flights like that where I come out with pages of just stuff that I wrote about whatever that was just coming to mind and ideas and plans or things like that. So just kind of being open to those unintended moments of pause and not thinking or some of the things that I think I do. And again, I don't associate them with doing natural creative exercises, but now upon reflection and going back to those lessons, I can kind of connect the dots of like, oh, that's kind of what I'm doing.»

Mia (3-4 years) described how she learned about meditating during the course and how she and her partner have adopted mindfulness exercises in their life to find balance and to step away from the daily work pressures, as she said

We've started doing meditations after days that are quite stressful right before bed to help us wind down and relax. So, kind of using mindfulness to help us be better professionals and better in our personal lives as well. I knew meditation is great and everything, but you helped us walk through it during class, especially during days where some classes are a little bit tougher, you have a lot of stuff to do. So having that time to meditate in your class was very helpful.»

Hunter (3-4 years) described how she uses silence walks in nature to hone and feed her creativity and how she uses things she notices to make up stories and to be playful in her own mind. She described

»I walk in silence, if I don't have a train of thought that I go into the walk with, I like to just look at things around me. I like to look at houses or the flowers in the spring, or sometimes I walk on a nature trail nearby and I just look at things. And sometimes if I see people, I'll make up stories about them or they're pets in the windows, and I like to think about what life is like in that person's home or what's the story of that house or

that car that just went by really fast? What are they on their way to? I like to take time on those walks if I don't have anything in mind to just make up stories, let my brain wander, let my inner child just have a moment to monologue about that busky that is howling really loud. I just think that creativity for me is just allowing in the sense of those walks my brain to just have fun and go, and nobody else needs to know about my silly stories. If I want to tell someone like you or anyone else, I'll tell them. And then it doesn't make me feel embarrassed anymore. I just can speak freely about the things in my brain that go on and I love friends or people that will allow me to take that space.«

Shayna (1-2 years) compared the alone time with going on artists' dates and taking herself out of her routine and exploring new things, as she pointed out

»I think the two things will be one - artist dates. I constantly, it doesn't happen every week as much, but I make sure that once a month I am taking myself somewhere to do something by myself. Sometimes I don't want to do stuff by myself, but I think it's important to also have that time doing something creative, something different by yourself. So, I make sure that at least once a month I'm doing something by myself that doesn't involve other people, but it is outside of my house, outside of my comfort zone.«

Xiaomin (1-2 years) described her »me time« as a time to be with herself and to enjoy the moment, as she described

»Because I think me time is a very personal and private time to everyone at that time. I don't need to do the work or the study and I don't need to talk to everyone else, even the close friend or my family. I just want, personally, I really appreciate me time because I think me time is, the time can recharge my energy because I really need to stay alone. And maybe sometimes I might think about my home day and maybe sometimes I will think about nothing. Maybe just empty my brain and sit in a comfort, sit with a comfort position and in my own room and without any interruption, maybe I just, the me times means for myself at this time, I can

do anything just for myself self, just anything can make me feel relaxed or comfortable.»

The above statements support the idea that creativity and creative thinking not only helps with adding a greater awareness of what oneself requires both physically and mentally to be balanced and to not get into the situation of constantly comparing oneself with the outside world. It allows for some internal grounding and relying more on our own intuition and skills instead of trying to do something we feel we need to do only to keep up with external pressures or to make other people happy. According to Marie Forgeard, »In a world full of challenges for mental health and well-being across contexts, creativity is an important resource that can be harnessed to help with coping, healing, and thriving.«⁵⁶

CREATIVITY & EMOTION

The connection between creativity and positive emotions emerged as another salient theme from the data analysis as well. Emotion and creativity are two subjects that are highly complex within their own domain and any connection between emotion and creativity is difficult to measure. Yet, research suggests that emotions can have positive effects when subjects perform divergent thinking tests and »that positive energized moods benefit quick creative idea generation.«⁵⁷

Ivan (9-10 years) described how creativity, creative thinking and creative activities make him feel positive and fresh, and that creativity and emotions are related. He explained

»I feel for the most part when I'm creative, I feel fresh. I think when one of my biggest fears in life is probably losing my mental acumen, and I think

56 Marie Forgeard (2024), Keynote Presentation at CEE Conference, SUNY, Buffalo, February 2024.

57 Ivcevic, Zorana. »Conceptual and Measurement Specificity Are Key: The Case of Creativity and Emotions.« *Creativity Research Journal* 34, no. 4 (October 2, 2022): 391–400. <https://doi.org/10.1080/10400419.2022.2122373>.

exercising creativity keeps that fresh. It keeps that fresh for me. And I understand the idea that thoughts and emotions are separate, but you still think through emotions. And I think the creativity doesn't just cause you to think, but if you can acknowledge and work through the emotions that come from your thinking together, then that is how you reach people on a deeper level. Because not everyone thinks the way you think, but pretty much everyone feels common emotions, right? So yeah, I think that's a big part of feeling positive and feeling fresh whenever I am creating for the most part.»

Emma (1-2 years) shared that practicing her creativity by doing some artistic expression helps her stay connected with her inner self and it allows her to find her balance. She also draws a connection between her being creative and expressing her artistic side as a way to connected and support her identity as she said

»I need to have moments of creativity. And for that, that is painting or drawing or doing something artistic to make me happy. And I do find myself, if I don't practice it, somewhat unhappy or somewhat unable to cope with life as easy. So funny enough, when I go home to my mom's house, I have all my craft supplies there, and I do find myself shutting out the world for a day and being creative, just crafting or whatever. And I find afterwards I was like, I really needed that for myself to make me feel like myself again, to make me feel happy. In day-to-day life, you're not given a ton of free range and space and time to do those things unless you take it. So, I have found that to be very, very important in my life.»

Engaging in artistic endeavors and practicing creativity at a tactical and practical level – in addition to creative thinking and thought processes, has positive side effects on mental health and emotions.⁵⁸ When asked about how she thinks and feels about her own creativity, Sage (9-10 years) shared that creativity is always with her and that any creative act she engages in makes her

58 Fancourt, Daisy, and Saoirse Finn. *What Is the Evidence on the Role of the Arts in Improving Health and Well-Being?: A Scoping Review*. Copenhagen: WHO Regional Office for Europe, 2019.

feel happy. She mentioned that even small creative activities have the power to generate that feeling in her as she described

»Basically, everything I do, I feel like has this creative problem-solving aspect, even outside of my work, if it's how are we going to host this dinner? Kind of applying different creative exercises to that kind of stuff as well. I feel like when I actively realize I'm being creative, that's when I'm at my happiest. Sometimes I'm not realizing that I'm doing a creative thing, but when I do, I really feel motivated and I feel excited and I feel interested in what I'm doing, whether that's through work or through personal hobbies.«

Claire (5-6 years) remarked that creativity can appear everywhere and that she engages in small [mini] creative acts when she is feeling down and that those creative acts, as small as they might be, have a positive effect on how she feels. She described

»I mean sometimes when I do feel a little down, turning to a creative activity is just, it's the best way to free your brain to just not think of anything outside and just really focus on whatever you want to do because I don't think there are any limits to creativity.«

When asked about what his emotions were as he experienced creativity during the course, Juan (7-8 years) pointed out that

»Yeah, a lot of happiness, a lot of it, a lot of happiness and confidence. And you're not looking at the clock, you're not waiting for the bell to ring or you're just, it's like watching a movie that you love from beginning to end. Sometimes you have low points, sometimes you feel challenged, but yeah, for the most part it's happiness.«

THEME 5: THE COLLABORATIVE SELF – SOCIO-ECOLOGICAL CREATIVITY

»I think often in my career development with leaders or my managers and bosses, we talk a lot about me being like a Swiss army knife, and it often comes up that I can be creative or that I have an eye for creativity or design, even when I'm not in a career and when my peers are typically not, just because we're in a more business or strategy group. That often comes up as a highlight from my performance. Reviews are how I can flex and have abilities that go beyond the norm, and that includes the ability to be creative or to look at things differently.« Manuel (9-10 years)

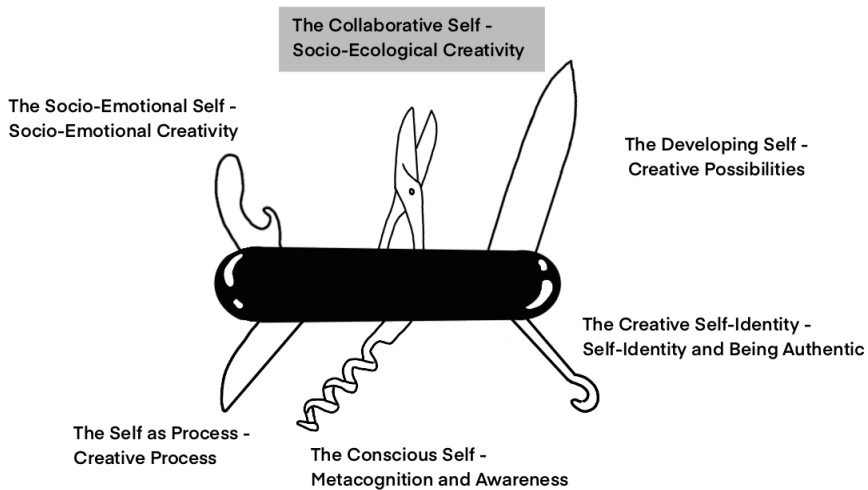


Figure 5-7. The C-SPECD Framework illustrating Six Dimensions of Creative Literacy – Swiss Army Knife. Illustration by Alexandra Vogel.

The data analysis revealed another major theme that is centered around the concept »The Collaborative Self and Socio-Ecological Creativity«. The Collaborative Self, in connection with the previously discussed topics The Creative Self-Identity, The Conscious Self, The Process Self and The Socio-Emo-

tional Self leads to a perspective that is oriented towards and involves others, and can be summed up as the Collaborative Self.

All participants expressed that there is an outward perspective that looks beyond the self within the context of where and how creativity exists in others and how creativity can impact not only the self but in others as well, and as part of a complex system.⁵⁹ Creativity and the creative process are not only being experienced at an individual level but are impacted by culture, society, and shared with others across different places, societies and cultures. Creativity happens not only »inside the head« of the individual creative person but also »in-between« persons and ecosystems.⁶⁰ Sawyer speaks of a socio-cultural creativity and acknowledges that as individuals, our creativity is never just created and owned by ourselves but created by the individual who is part of a larger system.⁶¹ Ogle argues that creativity happens similarly to social networks where certain players influence each other in a positive and negative ways.⁶²

All participants shared that they experience creativity in everything and that creativity is everywhere manifesting itself in small and large ways. The realization that everyone can be creative and that creativity is not limited to humans but can be expressed by animals as well emerged as another salient theme from the data analysis. The concept that creativity leads to better communication among people and fosters human connections arose as an additional salient theme related to outward and socio-ecological aspects of creativity. It appears that learning about creativity and embracing creativity not only leads to a better understanding of oneself and other people, but also allows for a more human and authentic way to interact with each other.

Everyday creativity has been acknowledged by creativity researchers as a creativity that can show up anywhere and happen in numerous ways when

59 Csikszentmihalyi, Mihaly. *Creativity: Flow and the Psychology of Discovery and Invention*. 1st ed. New York: Harper Collins Publishers, 1996.

60 Lubart, Todd, Vlad P. Glăveanu, Herie De Vries, Ana Camargo, and Martin Storme. Chapter 20 - »Cultural Perspectives on Creativity.« In *Creativity*, edited by James C. Kaufman and Robert J. Sternberg, 1st ed., 421–447. Cambridge University Press, 2021. <https://doi.org/10.1017/9781108776721.009>.

61 Sawyer, Robert Keith. *Explaining Creativity: The Science of Human Innovation*. Oxford: Oxford Univ. Press, 2006.

62 Glăveanu, Vlad Petre. »The Possible as a Field of Inquiry.« *Europe's Journal of Psychology* 14, no. 3 (August 31, 2018): 519–530. <https://doi.org/10.5964/ejop.v14i3.1725>.

humans live their daily lives.⁶³ Mini-c creativity is very personal and shows up when we pick a dress in the morning and think about how we want to express and portray ourselves throughout the day.⁶⁴ Creativity also happens when we design and organize a creative birthday parties, think about how we can surprise friends, family members or romantic partners with the intent to create special experiences.

Creative inspiration can come not only from other players, agents within the network but also through aspect like nature, tranquility, artifacts as well as other living things that one can see and notice. The general awareness paired with a strong self-identity and the emotional ability to be empathetic for others is then being amplified as these elements provide the foundation to recognize and appreciate creativity and everything creative on a larger scale. It appears that the field of creative vision has now been expanded from the self and the partnerships of $1 + 1$ and has been moved to $1 + n$ – infinite abilities of interactions and collaborations affecting each other. Once the creative individual has established themselves with a strong creative self-identity, the impact that creativity can make and the areas where creativity and creative inspiration can come from becomes infinite. The majority of participants shared that creativity helps them become better humans and that as creative humans they put more value in a larger world where the individual is part of a larger creative ecosystem.

Systems theory provides another perspective when looking not only at creativity but at creative thinking and the creative process. As we have seen so far, all participants spoke about the complexity and the many influencing and interconnected factors that can shape how their creativity shows up in their personal and professional settings. Thinking in systems is a way of thinking that represents a mindset that recognizes the complexity of creativity and creative thinking as a system that addresses three aspects: »elements, intercon-

63 Richards, Ruth. »Everyday Creativity: Our Hidden Potential.« In *Everyday Creativity and New Views of Human Nature: Psychological, Social, and Spiritual Perspectives*, 25–53. Washington, DC, US: American Psychological Association, 2007. <https://doi.org/10.1037/11595-001>.

64 Kaufman, James C., and Ronald A. Beghetto. »Beyond Big and Little: The Four C Model of Creativity.« *Review of General Psychology* 13, no. 1 (March 2009): 1–12. <https://doi.org/10.1037/a0013688>.

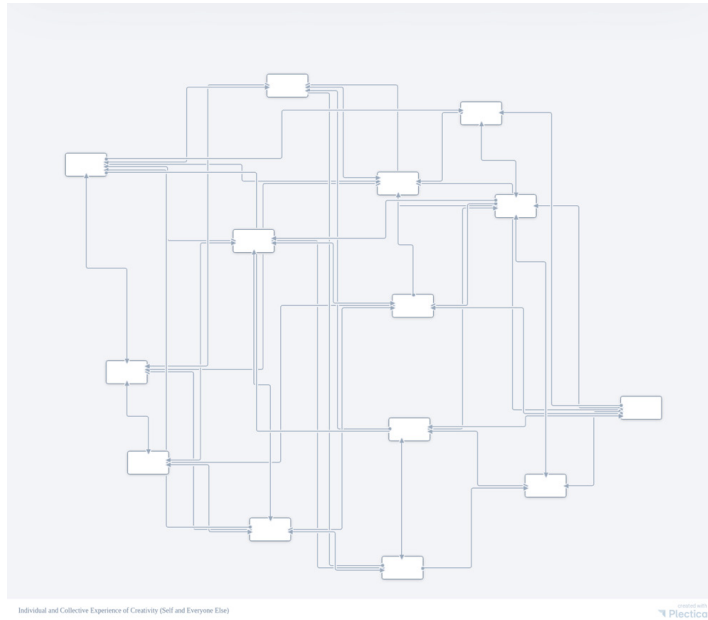


Figure 5-8. The individual person experiences creativity as a member of a larger system and their individual creativity is influenced and inspired by the whole system.

tions and a function or purpose». ⁶⁵ A combination of the previously discussed themes such as the increased awareness, metacognition, creative self-identity, process knowledge, empathy and the balancing of inwards and outwards perspective provides the foundation to view creative thinking as a way to think in systems. According to Cabrera and Cabrera »an awareness of the numerous interrelationships around us forms an ecological ethos that connects us in an infinite network of interactions. Action-reaction relationships are not merely important to understanding physical systems, but are an essential metacognitive trait for understanding human social dynamics and the essential interplay between our thoughts (cognition), feelings (emotion), and motivations (conation).« ⁶⁶ This quote represents what all participants shared about how they experienced the course and how creativity shows up in their lives.

65 Meadows, Donella H., and Diana Wright. *Thinking in Systems: A Primer*. Nachdr. White River Junction, Vt: Chelsea Green Pub, 2011.

66 Cabrera, Derek, and Laura Cabrera. *Systems Thinking Made Simple: New Hope for Solving Wicked Problems*. Second edition. New York: Plectica Publishing, 2018.

CREATIVITY IS EVERYTHING AND EVERYWHERE

The fact that creativity is complex and appears in many different ways at the individual, group, societal and cultural level provides a major building block to see ourselves as creative individuals who can influence other creative individuals while at the same time, we, the creative self, can be inspired by other creatives but also by everything we interact with in this world. We now have the ability to see things anew and to recognize and find inspiration in the existence of the smallest things, might it be a butterfly, an ant, a dog, a cat or a flower that inspires our creative thoughts.

Katherine (1-2 years) revealed that the course allowed her to recognize that creativity is everywhere and not only tied to creative exercises that might have happened in the course as she said

»Since taking the course, I've experienced so many more things in my day-to-day than I had before then. I think this course really helped me understand that creativity is everywhere, and it's not just in just typical things that you would think are creative. Before the course, I thought it was just in the classroom or if I'm doing work. But I really think about it when I'm in the kitchen or even if I'm at doing a run and exercise or if I'm setting the table, I always just think of all of the different things of how I can incorporate different types of creativity. And I see it definitely in my day-to-day. I also see it when I'm getting dressed in the morning, my fashion sense, I just see it everywhere now, which is crazy, because before then I would've just thought it was in the classroom or is at work.«

She described that creativity has become something rather complex that is intertwined with many different aspects of life as she recalled

»I think [creativity] it's more of just an overarching theme. I don't even know. I think it's such a complex term. I think creativity is just found in so many things. So, I guess it could be creativity is something that is found everywhere.«

Sadie (5-6 years) explained that she takes the concept of creativity further as she recognizes that not only humans but also animals can express their creativity. This expanded view of what creativity is and where it shows up serves as a reminder to recognize limitations the world puts around her and to be conscious and remind herself to step out and live her life creatively. She said

»It's not only humans who can be creative. Elephants can paint when you give an elephant a paintbrush. The elephant is painting, gorillas can do it. I've seen that dog on TikTok speak to its owner by tapping on little things that indicate certain things that's creative because we're people, animal mammals, we can all do something creative. The fact an elephant can paint is insane to me, but they can remind us of, it goes back to we're boxed in every day unless we fight it and everyone wants to put us in a drawer in the companies and school and all this stuff. I hate that. So, let's create our lives.«

Sadie continued by describing how she considers cooking as a creative activity that illustrates how far and how deep we can take our creativity. Sadie's example illustrates what Kaufman and Beghetto express in their Creativity 4 C model as everyday creativity or little-c creativity that shows up in everyone's life, eminent creativity that is performed by highly accomplished creative superstars, as well as creativity that happens at the mini-c, when creativity can be enhanced by learning and the pro-c level where creativity is applied by professionals in areas such as creative industries.⁶⁷ Sadie said

«When I cook and I never use a recipe, I just make something random. I'm being creative and it's awesome and I'm creative all day. And I don't think about it until now that I'm saying this. The coffee I made this morning, the way I made it creative, the workout that I did, the way I organized it, creative in its own way away, my dinner that I'm about to make later, creative in its own way. And then my dinner versus a Michelin star restaurant where it's like 12 different courses

67 Kaufman, James C., and Ronald A. Beghetto. »Beyond Big and Little: The Four C Model of Creativity.« *Review of General Psychology* 13, no. 1 (March 2009): 1–12. <https://doi.org/10.1037/a0013688>.

is definitely more creative than mine, but it's not saying what I did wasn't creative, they just took it to a deeper level. And I think that's what I mean by it can get deeper and deeper and deeper, but it's still creative.»

She continued by elaborating how the course helped her shift her perspective and how the accepting of everyday and everywhere creativity has become liberating as she shared

»Creativity comes in many forms for sure and can feel daunting, but if you strip down creativity and don't overcomplicate it, it's simple. Just be creative. It's everywhere. And having that way of looking at it makes it less daunting. And it's like now creativity is one of those things where when I first took the class, I was like, what the hell? What is this creativity, art? But now it's like, oh, creativity, let's take it and run with it. What's going to be the creative stuff I do today? It's exciting. I love to be creative now.»

Hunter (3-4 years), pointed out that creativity is everywhere and can be owned by oneself and show up in so many different ways, as she said

»I've found that the way a class has impacted me the most is I love to share it. I love to tell people about the teachings of that class and how we can all be creative. I love to remind people that creativity is not just a linear artistic thing, it's innovating in whatever space you're in, in whatever capacity. It's pushing yourself. It's seeing the world differently than other people. And I like to also take the small things and just make sure that I have something that through any phase of burnout, through any phase of life, it doesn't have to be a competition, it can just be mine and it'd be my own creative thing.»

Jason (5-6 years) realized that he can find creative aspects when working with numbers, spreadsheet or preparing a presentation at work, as he pointed out

»I got the opportunity to work in a marketing analytics consultant role with [company name] where I was working with spreadsheets and making charts and PowerPoint, presenting that all day. It's what I actually really love to do now, but it's not something I would call super [creative]. You wouldn't say, oh, that's a really creative field you're in because it's really not. But it is because when we apply this framework that you gave us in our course, the creativity comes out even if it's the driest spreadsheet you could possibly look at, it really helped me with presentations.«

Darika (7-8 years) described how the concept of creativity expanded after her course experience and that now, she identifies and can see creativity in every aspect of life as she said

»So now creativity for me as a concept is so much more. It's not in a box. It's not as simple as doing a piece of art or singing a song or learning to play a guitar. Creativity for me is today a much bigger and much larger concept, whether you want to call it spiritual, whether you want to call it more evolved, I think it's bigger than us. So, we're a part of it, which is why people say that you need it in everything that you do, whether you're driving a car, whether you're fixing a shelf, whether you're whatever it is, it's not, oh, I've drawn a painting or it's not what we typically think are creative acts. Finance could have creativity. How you do an Excel requires creativity. So, I think the concept is much more, it's bigger than us, and I think that's how I had learned to look at it.«

Darika continued by explaining how her perspective about creativity changed during the course as she associated creativity with artists, musicians and fashion designer prior to the course. After the course, this perspective changed and she recognized the everyday and everywhere aspects of creativity as she said

»So, I always thought that either you had it or you didn't. And the course kind of changed that for me, and it made me realize that you need creativity to do multiple things. When you're setting up a home, you need

creativity. When you're going to the grocery store, you need creativity. And creativity makes your life easier. It makes everything more efficient. It's a better way of doing things, and there's no end to it, so there's no limit to it. You can't say, okay, now I've reached my creativity max. So that's the beauty of it. And I think the more you discover more about it, the more you feel like there's more to know. So that's why I say that's say it's kind of like spiritual because there's no end to it. So, the more you do it, the more there is to do kind of.»

Ivan (9-10 years) connected creativity with everything in life and with every creation we can experience, might it be physical products to the world we live in as he pointed out

»I know everything's created one way or another. So, I mean, for me, literally, I'm sitting here, look out my window across the street in my neighbor. Somebody created their house, somebody created the blueprint, somebody created the bricks, the roof. I mean, everything's created. So, creativity is everything.«

Claire (5-6 years) described that her dog inspires her to be creative as she applies the concepts learned in the creativity course and makes conscious decision about how to creatively dress the dog when it's cold outside as she described

»I have my dog right here, he's trying to get my attention and I think he's also helped me to be more creative, finding creative ways to keep him entertained. I think it's definitely helped me see that creativity is everywhere and there's always a creative way to solve a problem or not even a problem just to enhance your life and you just have to think a little harder.«

Claire continued by defining creativity as a getting out of one's routine and being creative in many different aspects of life as she explained

»It's just doing something out of the norm and breaking your routine and just finding a non-traditional way to do things or even just doing something new, experiencing something new and having your brain do something that you're not used to doing. Creativity, it just can be found in so many things and done in so many different ways. There's no traditional way to do it. It's just allowing yourself to be bored and allowing your thoughts to do something that maybe you wouldn't normally do or that other people wouldn't normally do.«

Hana (7-8 years) described her learnings from the class and her realization that she can use creativity in so many ways, every day and everywhere, in her personal and her professional life as she pointed out

»Creativity in general is just everyday life. So even when I write email to a coworker or client, I can use some creativity and then make some joke, put it in there. I mean it should be in a timely manner, but something like in the people or the manner allows. I want to be more creative to be just living in this life, still having conversation with my husband or having a cooking dinner. I don't want to eat every day the same things. I want to be more creative to make some different food and take some different recipe from here and there and try to make my own recipe. I think that's kind of a creativity, so it's not only work, not only being more a broader concept of creativity, but I think creativity can be everywhere.«

Hana added that she learned to apply creativity even when having conversations and interacting with people as she said

»When I took the course, oh yeah, I realized we could use this creativity to any kind of situation or any kind of a feels for professional setup or even having conversation with people, my partners and stuff like that. Then without creativity, we can't be truly enjoying the moment.«

The association of creativity being everywhere and in everything is also being expressed by Andrew (1-2 years), who explained that for him, there is no single source of creativity and that inspiration to be creative exists in many places and things as he described

»One of the most important lessons I learned in [the course] is that creativity doesn't necessarily come from one source. I think if you have a bunch of outside sources, your daily interactions or if you look at the smallest little things, just looking at the finer details I think is another thing that creativity can come from that I learned from your course.«

Manuel (9-10 years) explained how the course allowed him to see creativity in so many different fields as he pointed out

»But I remember the course being really eye-opening in terms of how you can apply creativity beyond the arts and the artistic field. And I again tell this to people often how you can be creative as an accountant. And even though that has sometimes negative connotations, how you can be creative as a lawyer, how you can be creative as a salesperson, which is kind of the world that I exist in now. You can be definitely creative as a strategist and whatnot. And so those are some of the things that stuck with me and that I've now considered myself much more of a creative. And sometimes, if I use that for myself, I have to qualify and explain that to people that I don't mean creative as in from a craft arts perspective, but creative in thinking and creative and analyzing problems and all that. And so, that, I remember sticking with me and something that I've applied throughout my career since.«

Juan (7-8 years) explained how he started seeing the connection between creativity and its everyday and everywhere applications as he stated

»The first question that that course posed to me was defining the different strands of creative application or creative as a whole in your life. There are things that you can do creatively as a human, you can do on a per-

sonal level, on a daily life, the clothes you wear, the clothes, how you feel, how you talk to people. But then what I found more fascinating is the connection that [creativity] has between your personal life and your professional life.»

EVERYONE IS CREATIVE

Creativity shows up in many different ways and humans are born with innate creative abilities that can be expressed every day in small and large events.⁶⁸ As young children we demonstrate divergent thinking by expressing our innate curiosity, illustrating our ability to come up with many different ideas, thinking of unusual combinations and questions concepts that adults have grown to accept and to see as part of rules and regulations of living within the guidelines of specific cultures. As we grow older and become more aware and conscious of our self, we begin judging ourselves and those around us in order to fit in or to purposely stay out and rebel.

Participants reported that during the course they realized and rediscovered that innate ability to be creative and that everyone is creative at the individual level and should practice that creativity muscle, as Claire (5-6 years) pointed out

»So, from what I remember, it was just finding ways to flex the creative muscle because I remember just you letting us know it's a muscle that you should exercise and everyone is creative in different ways and it's a muscle that needs to be used. And the more you are creative, the more, or you try to be creative, the more you can be. I definitely think about that a lot in my life today. I try to find little ways to be creative. It's not like I'll lose it, but I feel like the more I am creative, the more I'll allow myself to also find new ways to be creative. I always try to take some time to paint outside of my job. I feel like sometimes I'm not super creative in my job, but I will try to find ways outside of that to flex that muscle.»

68 Richards, Ruth, ed. *Everyday Creativity and New Views of Human Nature: Psychological, Social, and Spiritual Perspectives*. 1st ed. Washington, DC: American Psychological Association, 2007.

COLLABORATION, AFFECTING PEOPLE IN A POSITIVE WAY AND FINDING A COMMON LANGUAGE.

We humans are social creatures and prone to collaboration, as collaboration is connected to community and to accomplishing challenges together and solving problems with the help of each other. This tendency towards collaborations seems to be enhanced through the realization and acceptance that everyone is creative and has creative abilities, and both aspects foster a belief and trust to collaborate with others and to seek other people's creativity.

While the concept of the lone genius creative exists and might be practiced by some in this world, all participants in the research study expressed that creative collaboration is key to how they practice their personal and their professional creativity. The data brought to light that participants favor creative collaboration after the completion of the course as they realized the individual creative power can be so much more beautiful and effective when paired with that of others and working together. Emma (1-2 years) said

»Don't do it alone, I think is my opinion. Having someone there that you can experiment with and try things out with and fail with and collaborate with, I think that's a super powerful part, at least with my process.«

For many participants, collaboration has become a new normal that is part of their creative process. Katherine (1-2 years) drew a direct connection to the course during which she realized that collaboration with others can lead to more and better ideas and can also be enjoyable, as she pointed out »

One thing I think I've noticed is that I like to be creative or be in a creative space when I'm with other people. Before the course, I really relied on myself for creativity. So, when I was coming up with projects and ideas, I relied on my own brain and myself to complete things. But I think after the course, I've noticed that I come up with my best ideas when I'm with other people and when I'm kind of just sharing ideas with other people. Because in my head, I always thought before the course that to come up

with a good idea, you have to come up with it on your own. But I think after this course, it really helped me realize that other people are there for you to come up with other things as well.»

Charles (9-10 years) described how he has become a better collaborator for co-workers as he has become more knowledgeable about his colleagues' creative processes as well as his own, as he pointed out

»My career now, and for a long time, has been in strategy. And so, I would say... Well, specifically in creative strategy, one of those nebulous terms. But just being able to work with creatives in a better way, because of having taken that class and having understood the creative process on a different level, has allowed me to be a better partner and a better teammate to those creatives as well. So, yeah, there's a lot that I've learned and put into practice.»

Jason (5-6 years) associated the creative process with collaboration and pointed out that while one can work creatively as a solo artist, author, painter, creator, he prefers collaboration as we are all influenced by others and that by accepting or at least being willing to listen to what others have to say about our work, our work can be enhanced and improved. He said

»Creativity as a process. I mean, it can be a solo process, but I'd argue it's always a little better when you have input. I mean, even the best authors, the best painters, they're getting thoughts. They had teachers, they had mentors, they have editors, whatever. And the creative processes, it's being collaborative, sort, built into it. Getting the perspective of people changes the way we think about things because we respect those people. We appreciate what they have to say. We can't think about it all. And even though two people could be the exact same things, they're going to look at them sometimes a little differently. And that complimentary relationship is what drives creativity. And it's a connection. You built something with someone and it's just really cool problem solving like that in a way that both parties of the tie to lifts all boats is just super

rewarding. And it happens all the time. Being creative is very collaborative in that way.»

Darika (7-8 years) related her interest in collaborating with others on projects directly back to the course as she described how she and other classmates were engaged in numerous group brainstorming sessions and learned that that can be more productive than doing it as a solo practitioner, as 'he stated

»It's something that I think I really value today when I'm given a project, it's no longer about just working in isolation. I feel like my best ideas come when I talk to other people about it. And it is like a conversation where you come up with an idea, you say something and then someone else could come up with something totally different based on what you said. But somehow it all works together. And that's something that I learned also at my time there because we would work in groups and we would brainstorm. And I think that's really where the magic happens. So, I think for me in a nutshell, I think these are the few key takeaways that I took away from that course.»

Ivan (9-10 years) considered creative collaboration and his willingness to collaborate with others as one of the biggest take-aways from the course as he learned, particularly as a self-declared introvert, that he appreciated the power of collaboration as he stated

»I would also say the biggest growth factor from the course for me was probably the roots of collaboration. And I think in some ways the course was ahead of its time relative to the world that I entered once I left the course and once I left the school in terms of, I don't want to say forcing collaboration, but facilitating it I guess mean obviously that was part of the criteria of the course was to collaborate with people, but I always thought of myself as an introvert and I still do, but over time I feel like tend to find balance in a lot of things, but I feel like the course really caused me to get out of my own head and caused me to really value the input and the energy and the places that you could go together with other

people as opposed to trying to wade through or work through your creativity all on your own.»

He continued by explaining how he practices collaboration in his professional work and how the creative process as well as the collaboration with others is no longer about the ego of the individual, but the focus has shifted onto developing the best idea, solution and concept for the task at hand. Independently, who might come up with the best idea, ideas can come from everywhere and his role as a creative leader, has shifted to empowering and instilling creativity in others in order to increasing the probability to come up with the best and most creative ideas as he pointed out

»I tell everybody I work with, I'm not about my ideas, I'm about the right idea. I don't care where it comes from. I don't care how we got there. I don't care if it's one person group of us. I just want to be able to recognize it and I want to be able to drive people to it. So, from that perspective, yes, I think what I was describing more is personal and very high-level worldview, but professionally for sure, you definitely want to be able to creatively influence people, but for me it's important to influence them in the right direction with the right idea. And it's not about it being mine, it's about recognizing what's the best idea, the best route for all stakeholders involved. And trying, again, reverting back to collaboration and trying to think about the totality of the group and how whatever decision or direction, every decision will be made direction is going to be pursued, trying to get the best impact for all of the stakeholders if you can, or at least as many of them as possible in the situation.»

Claire (5-6 years) simply stated that she enjoys collaboration because people with different opinions, backgrounds and cultural frameworks can add many new perspectives, as she pointed out

»I think also just collaborating with other people and sometimes you may have one piece of the puzzle and just talking to people and also different cultures, they can give you so many new ideas.»

CREATIVITY – A UNIVERSAL LANGUAGE

Creativity, particularly when applied and practiced in group settings, holds the power of being a language that translates differences and allows us to arrive at common goals and produce collaborative achievements. Participants shared that they are attracted to work with others and are inspired by other creatives, and there seems to be a creative attraction that becomes part of a creative individuals' life. This creative attraction was experienced during the course and associated by the majority of participants with developing a common language that others, who completed a creativity training as well, share and understand.

As creativity can be used as a common language, creative ideas then can become powerful tools to affect people and possibly move other people as Charles (9-10 years) shared

»When you take something that is both a creative idea and moves other people. And what I mean by that is that it inspires some sort of action, it creates some sort of positive change, whether that's on the mass societal level or very small on the micro level. But it is both creative and an arresting concept, something that people want to be a part of, but it's also impactful.«

Sonya (1-2 years) spoke about her creative work having the potential of impacting people on a broader level when they experience the tactical execution of a creative idea, as she explained

»I think creativity is also a way to just connect emotionally with people. And I think that's one of the things that really makes me feel like I've left my mark because it's me, not necessarily me connecting with people one-on-one as if I'm talking to them and as if they're my friends, but my ideas and my ways of showing how this could come to life really makes people want to be there and want to engage with either the activation or the campaign or whatever the copy is, if that makes sense. So, it's like it's just a way of connecting.«

Hunter (3-4 years) explained how creativity allows her to influence her environment and the people around her in a positive way. She mentioned that she is aware of her brother's interest in architecture and that he thinks of opportunities where she can help him delve into and access more of his own creativity. Additionally, she connects this ability to see creativity in others and to foster other people's creativity as a leadership skill that separates managers from leaders in her professional work setting, as she explained

»I'm interested to see how I continue to put creativity in as I potentially shift into new industry sectors or as I have a family of my own and things like that. Because I think creativity isn't something you're taught, but it's something you can learn from everyone you interact with. I feel like [creativity] it's a really good skill and I think it's a really good leadership skill. People don't realize that being able to see different people's creativity and thinking process is what truly in my mind creates a leader versus a manager. Anyone can try to be a manager, but not many people are a leader and a manager.«

Hunter continued by explaining that with a combination of empathy, her own creative thinking skills, her awareness of other people's creative abilities and potentials, she is able to influence her co-workers as well as friends and family members, as she explained

»Because I bring a level of creativity and that kindness and empathy from knowing everyone thinks differently and I'm able to step in to help us all bring out the most interesting creative, whatever fits the adjective possible. And I'm able to unlock other people's, which makes me sound very braggy when I say this, but I'm able to help unlock other people's creativity because I myself don't let my creativity be inhibited by the societal standards of professionalism. We're allowed to think outside the box, and that's definitely made me important to my team, which I am glad for. Without that class, I don't know if I would've gotten there. Genuinely, your class paired with that commercial class just gave me so much uninhibited creativity that I was able to just really realize that not every project has to be perfect. Sometimes it can just be fun and sometimes the fun projects get you even further.«

Charles (9-10 years) added that his creative awareness, ability and creative identity helps him support other people and help them foster their own creativity as he shared

»I think that having an appreciation for creativity allows you to see the creativity in others, people around you. It allows you to build people up versus tearing them down. Something that I've always... Or I have in these last few years, learning to manage people, and to build teams and build departments, and really unlock the best in people is another one of my mantras, which is to believe in others more than they believe in themselves. And I think you can only do that if you also believe in their creativity. Especially in our line of work. And so, I've always stressed that ideas can come from anywhere, like I said, and stress to my teams that, when they're writing a brief or they're writing a strategy or whatever it might be, even an insight, to always put forth an idea, to always put forth something that it could look like. And that's pushed people out of their comfort zones, but I tend to believe that my own appreciation for creativity and that it can come from anywhere has also bettered the people around me too.«

FACILITATING CREATIVITY IN OTHERS

Meeting other people and communicating and sharing ideas with each other emerged from the data as another topic within the socio-ecological dimension aspect of the C-SPICE framework. The exchange of ideas can lead to the birth of new ideas and something completely new or they can simply enhance and improve an already existing concept or it can lead to something completely new. Unplanned collisions can happen when people come together and communicate with each other and share ideas. This can involve strangers, work colleagues and or friends and the interchange and of ideas meetings and exchange of ideas happen in the workplace and in our personal lives. When creative minds come together, chemical reactions start and the ideas are flying back and forth like in a tennis, ping-pong or paddle ball match.

Denise (7-8 years) described a situation, when she met a stranger at a coffee shop and how this interaction with a new person led to the development

of new workshops but also the fact that the newly developed workshop had an impact on another set of new people. As she pointed out

»Just the other day, I was at the coffee shop randomly, and this woman started talking to me. She's seated across from me. And we started talking and we realize, oh, we have all these things in common. And so, we're talking about how we have this desire to create something. We're feeling this almost itch for something to come about. And it's like now we're talking about hosting these workshops together. So even in that, it's like I feel like there was something necessary there for us to get together and have that conversation for the idea for us to bring together our creative ideas and our different backgrounds and for this new idea to come out of that.«

She then continued by adding

»So, I feel like there's something there with connecting with other people, whether they're similar to you or not, and having these conversations and being able to see what comes from it. And I found that a lot of things that I've done here have been like that. Where I connect with someone, we're having a conversation about something and it's like, oh, wait, wow, I should do that. Or You should do that, or something. And then they go off and do something or I do something or we do something together.«

Sonya (1-2 years) shared that creativity makes her a better communicative person who is creative when she engages in conversations with others and is able to navigate the conversation without getting dull or boring, as she shared

»I think creativity is something that I really value and people as well, because it's a way for you to, like I said before, it's a way to connect with people. And I think creativity brings out when you're having a conversation with someone and you're creative, you normally don't run out of stuff to say you can be tired, but you stopped talking because you're tired, not because you don't have anything else to say.«

Anna (5-6 years) pointed out that the course helped her connect with other people more easily and that she has been drawing people in her work environment into her projects and that this teamwork and involvement of others has led to better and more ideas when working on projects. She explained

»So, it was exciting, interesting, but also inspiring to see that how I can start a conversation and get other people involved in it. So, it's definitely people came up with all kind of really, really creative and out of the box ideas. So, it is reinforcing, my idea is that, oh, I can do it. I can also help others do it. I can make a change in the group immediate surrounding me around me to be more creative and thinking about every single thing in life and not just when it comes to solving a problem now, which is like five years after I have taken the course.«

She also shared that she does volunteer work and helps high school students who immigrated from from her native country, and she not only helps them getting settled with their new lives in the US, but she also shares her experiences about creativity and teaches them about how they can develop, apply and improve their creative thinking skills. She said

»I'm mentoring a few high school students from [country name], helping them getting acquainted to the college life in the US and this is where I saw a lot of opportunities for using my creativity, my creative thinking process, tell it to other people, spread that awareness. And I also see those mentees that I have embracing it and see great results. They came back to me with a different attitude to what their problems, and they came back to me not with more questions, but also with possible solutions instead of being helpless and directionless in their lives. So, I'm seeing it as branching out, and I think now my thought about creativity or creative thinking is that it is spreadable as well. You can inspire other people, you can educate other people, you can help other people achieve the same awareness that will unlock the creative power. So, it is spreadable and it's powerful, inspiring.«

Impacting other people can be a two-way street as the sharing of creativity and creative ideas not only can impact and affect others but can also help build confidence through the validation that other people like and appreciate our ideas. Hunter (3-4 years) described how the course experience helps her to strengthen her co-worker's ability and to push further when they have ideas and thoughts related to projects in her work environment, as she pointed out

»And I only knew how to do that [because] I had your [creativity] class as a background experience of being like, what are other people's creative strengths? Let's capitalize on those. And then now, like I said, I do that professionally. I'll be like, okay, what's your creative? Let's talk about what you think we should do and then we'll figure out what you find creative. And over time we'll be able to create awesome things that are just for us, like my coworker's podcast that in the beginning it was just an idea that was just silly between the two of us. And I was like, no, let's think about this. How would we make this work? And now it's a fun podcast that has had some really cool guests and some good traction. So, you just need to allow, I allow people to be who they want to be creatively, and it really has been helpful professionally.«

Creativity not only allows us to develop empathy for other people, as we have seen within the previous theme Collaborative Self and Socio-Ecological Creativity, but to build emotional connections that are grounded in shared experiences about what creativity is and seeing the creative potential in others. The ability or at least willingness to give each other the benefit of doubt when people start sharing ideas makes people more willing to see potential in others and their ideas. This is true even in situations when an idea, a concept or a thought process might not be 100% clear and understood in the beginning.

Seeing the positive in people and seeing potential in people, particularly in those who might typically not be seen as creative individuals or who do not see themselves as creatives or share different perspectives than oneself, is another salient theme that emerged from the course experience. Timothy (7-8 years) reflected on his course experience and the fact that his creative process and his creative thinking skills allow him to create an atmosphere or an envi-

ronment where the so-called non-creatives or the introverts can feel safe and comfortable to express and share their ideas and thoughts. He illustrated how he applies this insight and skill in his professional work when he said

»Whereas from the theory that I've learned and understanding it, it's not necessarily the people who are the loudest. It's allowing people to be within an environment where they feel comfortable and they can express their opinions even though they are, even if they're introverted. Especially within corporate settings, you can build teams around you that are comprised of introverts, extroverts, you might have big bold leaders within there. You might have people who are really analytical. The creative process allows you to then pick people's strengths and allow them to input and really drive, come on that journey with you through having a process in place that everyone can follow and will input in. And I think when you intertwine the creative process within that you can really understand where people, how can they input into it. And that has been a big strength of mine following the [creativity] course, has been how I can bring people together of those who might be dominant. Some might be analytical, some might be more introverted, and how I can bring those people together and really probe, probe with open, it's not open questions, it's more how can I open up the divergent thinking process for them, but then also close that loop and bring them into that convergent phase. And that has been a big, it's a seesaw that is a fine balance where I really look to guide that process for people within team settings.«

Creativity affects people that are around us and our creativity is affected by those people surrounding ourselves. During the course, students experienced this more openly as each step of the process and the influencing each other is being discussed and reflected upon. Outside a course setting, the influence that creative individuals and creativity can have, is more subtle and as we are part of a larger system, the changes might be felt more faintly.

Himani (9-10 years) mentioned that in situations when creativity involves others and happens in a collaborative process which is often the case in professional settings, it is helpful to bring everyone along on the journey, as she mentioned

»You can't brute force your way to creativity. It has to percolate. And I think for it to percolate the more exposure around you through courses, through the people you work with, through the people you interact with, however it is however subtle, I think they all play a force into shaping you. There are certain cultures that place a premium on it [creativity] more than others. There are certain cultures that it shows up differently where it's more overt or it's more hacky. And I think all of those things kind of shape your lens, but it's definitely, I think something you imbibe over time and you can absolutely set out to consciously practice. And all that does is, it makes you more confident in your journey and it makes you a bit more aware.«

Adam (9-10 years) spoke about his strength of being able to help his coworkers foster and improve their creative thinking skills and creativity due to the course experience, as he described

»I think on my team I'm often sharing information, making sure other people have the skills they need, trying to foster people's creative skills. I think that's another really important skill is to be able to help other people's creativity grow and both keep them in check when they go off the road, but fostering creative thinking that I will help them succeed.«

He implemented many of the skills developed during the creativity course in his professional job after graduation and was able to help others by setting up brainstorming sessions as he added

»And they were creative meetings hosted by myself and some of my colleagues about things that we learned in your class, like how to brainstorm differently, how to freeform, think through things before you get right into the nitty gritty of the brief. And myself and some colleagues did that every month, I believe for a while.«

Sage (9-10 years) explained that she encourages the three people she manages to apply more divergent thinking when they engage in brainstorming or ideation sessions as she pointed out

»I exercise creative problem solving every day. I think I'm actually known for that, just being able to navigate a challenge and figure out different ways to go about that. And that's an exercise I'm doing with my, I manage three people, so I'm doing that with them constantly. Trying to get them to think of different ways they could tackle the challenge that they're up against. So that's very common part of my day.«

Particularly in the workplace, the ability of enhancing other people's creativity is a desirable skill. Valerie (5-6 years) spoke about her ability to help others unlock their creative potential as a superpower as she explained

»I admire creativity when I see something that I think is creative and different, and so I like that about my own self, that I can be creative and that I can lean into that. And yeah, definitely think it's a superpower. When I think about how I can add value to a project or to a team or to a company, I definitely think it's one of the things that I bring to the table is that creativity and the ability to help others be creative too. So, I think that's the other part, being so thoughtful about it or having learned some of these things from the course that allows me to be able to talk about creativity and how others can lean into it or leverage it or can learn more about it, can become more creative. I also think about that as part of, I think creativity is just how can I make my peers or people on my team more creative too? And so having the ability to talk about it and know how someone could unlock more creativity is something that I appreciate a lot.«

THEME 6: THE DEVELOPING SELF - CREATIVE POSSIBILITIES JOURNEY

»For me, my own creativity, I feel it's a journey and it still continues it, it never stops. And [creativity] it's one of the rare subjects where you continually learn and you apply the process yourself. You are not just going to be pigeonholed into one creative process. You will continually learn throughout your life and it is one where you will never get bored, you will always be challenged, you will always want to learn more as you go through it throughout your life.« Timothy (7-8 years)

Creativity is complex and represents a large system in which humans, animals and nature are intertwined. Humans who recognize creativity as a powerful force can utilize and further develop it on a lifelong journey that is filled with creative acts, productions and thoughts, allowing us to envision a future in which we are active agents and players.⁶⁹

While our role as active agents might change based on various circumstances, with creativity, we are able to actively influence our path, while acknowledging that we are also small and depending on the universe, serendipities and luck or fate. But it is the mix of many different factors that lets us apply our creativity and feel positive, confident and encouraged to move forward, to endure some hurdles and develop some resilience. As we have seen in the previous sections, The Creative Self-Identity, The Conscious Self, The Process Self, The Socio-Emotional Self and The Collaborative Self are intertwined and at play with each other. Thanks to creativity, moving forward, in most cases, means being on an upwards trajectory of human growth and development.⁷⁰

69 Glăveanu, Vlad Petre. *The Possible: A Sociocultural Theory*. New York, NY: Oxford University Press, 2021.

70 Valverde, José de, Laurent Sovet, and Todd Lubart. Chapter 6 - »Self-Construction and Creative 'Life Design'.« In *The Creative Self: Effect of Beliefs, Self-Efficacy, Mindset, and Identity*, 99–115. Explorations in Creativity Research. San Diego, CA, US: Elsevier Academic Press, 2017. <https://doi.org/10.1016/B978-0-12-809790-8.00006-6>.

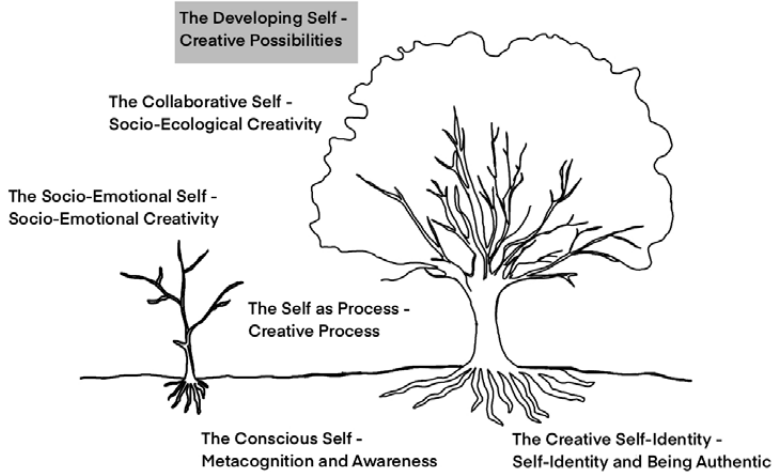


Figure 5-9. The C-SPECD Framework illustrating Six Dimensions of Creative Literacy – Tree.

The data analysis revealed that a sixth dimension – The Developing Self plays a major role in applying and fostering a creative life journey. Developmental psychologists have long believed that humans have the capacity and the ability to continuously develop themselves and grow over a lifetime.⁷¹ We are put on a lifelong journey as soon as we are born and that we have the opportunity to evolve throughout our life journey and as we are able to create, we can create ourselves. The concept of »self-growth« and »self-realization« is closely tied to human creativity⁷².

Aristotle considers the human journey and personal development as a way to live life not only happily but to live a fulfilled life.⁷³ This perspective was shared by all participants. The data analysis revealed that all participants consider themselves creative [human] beings who are on a lifelong journey

71 Richards, Ruth, ed. *Everyday Creativity and New Views of Human Nature: Psychological, Social, and Spiritual Perspectives*. 1st ed. Washington, DC: American Psychological Association, 2007.

72 Reckwitz, Andreas. *The Invention of Creativity: Modern Society and the Culture of the New*. Malden, MA: Polity, 2017.

73 Meyer, Susan Sauvé, ed. *How to Flourish: An Ancient Guide to Living Well. Ancient Wisdom for Modern Readers*. Princeton: Princeton University Press, 2023.

and that the course provided them not only with an epiphany and spark to pursue a creative life but to engage in life actively where being open to new experiences, open-mindedness, a desire to learn and self-development through continuous learning is accompanied by the ability to take greater [calculated] risks in life where ambiguity is no longer a hurdle that holds us back and keeps us from exploring ourselves and everything around us. Living a creatively filled life consists of practicing our creativity mindfully, discovering new things consciously and being able to see lightness in things where others might perceive darkness.

Glăveanu, Ross and Baumeister propose a science of possibility where humans have the ability to become aware of where we are in any given moment and are able to envision possibilities and directions we might want to pursue.⁷⁴ Reckwitz refers to everyday creative practices that allow us to develop pragmatic creative habits that can lead to experimentation, enjoyment and to distinguishing ourselves, and he considers creativity »an attitude of constant receptivity, a disposition to be always scanning the environment.«⁷⁵

OPENNESS AND OPEN-MINDEDNESS

Openness [to experiences] is a personality trait that is closely connected with creativity as well as creative self-efficacy.⁷⁶ Richards associates openness with the awareness of one's own creativity, the desire to live a creative life and the ability to continuously seek new experiences while constantly applying what one has learned from other disciplines, cultures and viewpoints.⁷⁷ Openness and being open-minded have been found to be a sig-

74 Ross, Wendy, Vlad Glăveanu, and Roy F Baumeister. »The New Science of Possibility.« *Possibility Studies & Society* 1, no. 4 (December 2023): 399–403. <https://doi.org/10.1177/27538699231211629>.

75 Reckwitz, Andreas. *The Invention of Creativity: Modern Society and the Culture of the New*. Malden, MA: Polity, 2017.

76 Barbot, Baptiste, and Heuser, B. »Chapter 5- Creativity and Identity: Formation in Adolescence: A Developmental Perspective« – Karwowski, Maciej, and James C. Kaufman. *The Creative Self: Effect of Beliefs, Self-Efficacy, Mindset, and Identity*. Boston, MA: Elsevier, 2017.

77 Richards, Ruth, ed. *Everyday Creativity and New Views of Human Nature: Psychological, Social, and Spiritual Perspectives*. 1st ed. Washington, DC: American Psychological Association, 2007.

nificant learning outcome of creativity trainings and students experienced greater openness and open-mindedness after taking a college-based course in creativity and creative thinking.⁷⁸

The data analysis confirmed that all participants reflected on being more open and experiencing a greater open-mindedness after the course, independent if the participant completed the course one year, five years or 10 years ago. The course content and the new understanding of creativity, creative thinking and creative process helped shift their minds and opened up some new perspectives allowing participants to see and seek out new opportunities where they previously might have hesitated.

When being asked about thoughts and feelings she has about having experienced the creativity course, Sage (9-10 years) spoke about feeling that there are endless possibilities ahead of her, as she said

»I think I felt very excited about how I could apply those things in my future career. I actually graduated just a semester after that [course] and was motivated and just kind of a little bit of endless possibilities, which might've just been paired with graduating from college. But I think that that [course] definitely kind of gave me the perspective that there's so many different ways to approach things and different ways you can express creativity. You don't have to be a traditional artist to be a creative person. You can be a marketer and be a creative person.«

During the course Sage became more open-minded and started pursuing more things she was interested in as she explained

»Being more open-minded to things, and this is something that I can see a vision for and I might not know all the ways to do it, but that just starting trying, then that kind of leads to one thing or another. And then I feel like I've become more creative by introducing those practices into my life.«

78 Habib, Sabrina, Thomas Vogel and Evelyn Thorne. »Transformational Creative Pedagogy in the Age of AI: A Multiyear Qualitative Analysis Across Universities.« Presentation at The South Oregon University 2024 Annual Creativity Conference, Ashland, OR, May 2024.

Although she completed the course 10 years ago, she acknowledged that the course kickstarted this new behavior as she pointed out

»It [the course] definitely kind of kickstarted this idea of exploration and trying new things and presenting work in different ways has definitely kind of come through to my current life.«

Stacey (7–8 years) shared that after the course she engaged in more new things and has been able to apply a beginner's perspective that one encounters when learning new things. This beginner's perspective can be helpful and applicable in numerous other applications outside the newly acquired hobby, activity or craft as she shared

»Throw yourself into new things, especially if those things are aligned. So, for me, a lot of the stuff that I do is ocean related. So, learning how to free dive and doing things, really engaging with the water in different ways, challenging my body, putting myself out of my comfort zone. That was a huge thing for me. Trying new things, dabbling in new things. I have a pottery class today, which I've never done before, but which I wanted to try because I'm looking at creating a particular piece, and I want to see if I can translate it into the jewelry. So, approaching it from a different subject matter, exploring different form factors that all kind of cycle back. So, I think constantly engaging with things that make you a beginner again, especially for someone like me who is so determined to succeed immediately, it's important t' be humbled, and it's important to use that space to experiment.«

Xiaomin (1-2 years) explained how the course experience helped her explore new ice cream flavors, a rather small change, but a change she became aware of and then understood how the concept of being more open and more open minded has been added as a new trait into her life. She said

»Sometimes when I review the things I did, I found myself already this in a creative way because before that course I'm a person who do not want

to try new things. I always order the same flavor of ice cream or when I went to some place, I always took the same way. They are very simple examples in my life.»

This illustrates some small changes and becoming more aware of those small changes can have a ripple effect and influence change on a large scale.

AMBIGUITY AND UNCERTAINTY

Openness and being open-minded also relate to how one experiences ambiguity and uncertainty and how we are becoming more willing to trial and error. Instead of blocking an activity from our mind or not engaging in a sport that might scare us, creativity allows us to go with the flow and adjust our action based on real facts, instead of not engaging in something because we might be afraid to do so. Once we are more open and open-minded, we can envision that an unknown situation could be good or bad, and we can decide to at least give it a try. Tolerating ambiguity is a personality attribute that has been associated with creative functioning and relates to Sternberg and Lubart's investment theory of creativity. A creative person, who is able to deal with ambiguity and uncertainty, buys ideas low and sells them high, by considering and pursuing unusual and unfavorable ideas while recognizing a potential that these ideas might get accepted eventually and have greater impact than less unusual and less groundbreaking ideas.⁷⁹ Developing and pursuing unusual and potentially risky ideas has become more important in industries such as marketing and advertising, where unusual and highly creative ideas are supposed to be original, innovative, surprising and at times shocking in order to get noticed and achieve positive business results.⁸⁰ People who are familiar with creativity and have experienced creativity in personal and professional settings are aware that one might have to try new things or

79 Sternberg, Robert J. & Lubart, T. I.. Chapter 1 – »The concept of creativity: Prospects and paradigms.« In R. J. Sternberg (Ed.), *Handbook of creativity* (pp. 3-15). Cambridge: Cambridge University Press. 1999.

80 Vogel, Thomas. *Breakthrough Thinking: A Guide to Creative Thinking and Idea Generation*. 1st ed. Cincinnati, Ohio: How Books, 2014.

think differently in order to produce something considered original, applicable and useful. In many cases this means taking the path not traveled or least traveled in order to uncover something valuable.

Mia (3-4 years) spoke about how she makes herself aware of the fact that uncertainty can be or have something positive as she explained

»Sometimes you just have to trial and error and I don't know, because that's kind of how I work best and how my manager and I work best. I'm given a task, I do it, and then I ask my questions and then I review my work with him. So, uncertainty. I'm also going through that with my personal life. I have to remind myself that it's okay to be uncertain about the future and allowing that to change because there was an opportunity for us to move to Paris at the end of this year, and that was giving me a little bit of excitement but also fear.«

Mia (3-4 years) noticed at the beginning of the course that her classmates felt uncomfortable with open-ended questions and ambiguous assignments and stated

»I remember a lot of people had difficulty with open-ended questions like that and people would always be asking questions. I experienced that at work too. We're briefed for something. I just want to get started. I don't need to ask any questions; I just need to word vomit. But I remember that in class, so many people had so much trouble. And I remember getting a little irked. That was the whole point of the assignment, is to take an open-ended question, see what you do with it. The stakes are so low. It was a very safe space. But that's I guess the type of exercise that everybody needed to experience is having an open-ended question and seeing where you go. But yes, I remember those. I love those. I think everybody became more creative and more comfortable with uncertainty after that class.«

Juan (7-8 years) explained that the course reiterated the fact that life is about trial and error and that we have to experiment and be open to new experiences that help us grow throughout our lifetime as she shared

»The course just confirmed to me that trial and error is fundamental, so you're never going to get it perfect, but when you get it slightly right, the feeling of satisfaction is like, wow, it's amazing. And for you, it's slightly right. If you're presenting something or whatever, those people are blown away and then you're like, you have no idea what's in the tank. Now I know what I need to make it better. And eventually you become better and better and better.«

The data analysis confirmed that the creativity and creative thinking course allows students to experience uncertainty and ambiguity and enable them to see a positive sides when things are unclear. While ambiguity and uncertainty might feel scary and challenging in the beginning, there is a sense of freedom and liberty as one is empowered to get involved in the decision-making process and become active in choosing which direction one might want to take.

Sadie (5-6 years) shared that she hates ambiguity but that the course helped her to take initiative and that creativity loves ambiguity and that ambiguity can be a positive thing, as she explained

»I used to really hate ambiguity. But in your class and then in life and then even in my professional life, sometimes ambiguity doesn't need to be a bad thing. It seems scary. Interpreting something and then showing something that you made that you thought, because you don't want people to think that, oh, this was so out of left field, what is this? Or this is not correct. But to me that's what, if you're being ambiguous or something's ambiguous, it's up to you how you interpret it. So, it's neither right or wrong, it just is, and it's just a reflection of you and how you interpreted something. But within the constraints of a professional setting, having and in general, having something be ambiguous is not bad. And in order to be really creative, ambiguity is necessary or it's good. That way you don't have to stay in a box and come out of the box.«

Darika added that she has been taking more risks after the course and that thinking about the unknown and a future that no one can foresee no longer represents a threat, as she explained

»I am taking more risks. I'm taking more risks, and it's okay. So, this is a concept that was introduced in the class. It was being in a state of flow. My whole life is governed by this right now. And I think I am trying every day to live by that. So, it's not so worrying about what the future holds. And I'm a very anxious person, so by default I tend to overthink. But being in a state of flow, not just when you are ideating or when you're supposed to be in a creative space, when you're perpetually in a state of flow is when things begin to move easily. You're not resisting the change; you're not resisting your doubts. You're not resisting people's opinions of you. So, when you're in a state of flow, life is easier.«

Sonya (1-2 years) commented on how he she experienced uncertainty during the course and that she learned how to better deal with ambiguity as she mentioned

»I think the ambiguity is something that I find hard to adapt to because I feel like I'm a very structured person. And in your class, I feel like yes, we had structure, but it was mostly ambiguous because it was always like, this is the prompt, figure it out. And I think that was a really valuable thing to learn how to do because even when clients come in, the role that I do, when clients come, they normally don't even know what they want and you have to come up with all of that. So, I think the ambiguity in that class was a very nice tool or a very nice way of approaching stuff because that's how problems work in real life. And I think the ambiguity also allows you to, I think in the same sense as the experience, it allows you to not tunnel and not just focus on that.«

Himani (9-10 years) provided an example that illustrates how she made a conscious decision to opt for the unknown and take a risk instead of going with a more secure and stable job offer right after graduation. Although she graduated from the course 10 years ago, she remembered that learning to deal with ambiguity and uncertainty has helped her taking more risks. She explained

»I think the other thing that I would say is kind of a takeaway [from the course] and kind of something that's applicable that I did apply probably was, and even if it was subconscious, was learning to embrace some degree of risk. Because when you are comfortable with ambiguity, you are then more open. Part of why we avoid risk is just you're scared of the unknown, but if you learn to be comfortable with the unknown, then you're a little bit more open to taking risks. So, I still remember when I graduated from the program, I had an internship at [Company Name deleted], the ad agency, and they offered me a full-time job, and that would've been as an international student, the safest path for me. I'd had a really successful internship, they were willing to sponsor me and do whatever, but I didn't go that route. And I decided to embrace a really risky path instead, which I'm not sure most people in my position would've gone that route because [agency name], it's established, it's known, it's a pretty popular place in Boston. But instead, I went with this small two women startup that was housed out of HBS that nobody had ever heard about, and I decided to go on that lesser trodden path. And in hindsight, that was the best decision I made.«

Learning to deal with ambiguity and uncertainty is related to divergent thinking and the ability to come up with many different potential solutions and scenarios. If one has only one thought or idea when faced with a challenge, the challenge can easily become overburdening and fear starts kicking into our system and thought process. But, with the experience and confidence to come up with 100 or more ideas to approach any given subject provides a backbone a place of confidence that allows us to better deal with uncertainty and ambiguity.

Emma (1-2 years) described this situation by explaining

»I remember from your class having to come up with 100 different ideas before we could settle on the one idea that we wanted to go with. And when I entered that period of uncertainty with jobs and what does the future hold, my brain was thinking, „Okay, you just apply for jobs and then that's what you do.« But the practice of saying, „Okay, maybe there's 100 different other solutions to try before arriving at the final destination.« That gave me new perspective of, „This is an uncertain time, so

maybe we should be trying 100 different tactics.» And I think during that time especially, I did a lot of things I've never done in my life before. And not just practices, but mindsets of seeking out new information in a different way or talking to people like I've never talked to people, or just putting myself in situations that I previously hadn't because I said, „Let's try this like we did in class during this moment when I need some guidance.»

Katherine (1-2 years) described how she experienced uncertainty during the course and how the ambiguity scared her and made her feel uncomfortable. Only through the culmination of the many exercises, challenges, discussions, readings and final project did she realize that this was part of the course design that resulted in students' increased confidence as well as their newly gained ability to deal with uncertainty and ambiguity. She described in detail how that experience panned out over the course of the 14 weeks as she explained

»When I'm thinking of uncertainty within the course, especially at the beginning, I had no idea. I knew what course I was going into with the title of the course. I had no idea what that meant. And the first couple of classes, I was just so confused, really confused at where this was going. And it was just such an uncertain thing. So, at the beginning, I was kind of just like, „Am I doing things right now? Am I doing things in general?» And I didn't know how all of those pieces in the beginning were really going to add up into the end, but I think that's why it was so uncertain in the beginning and the middle and even towards the end of the course, because it was just, I had no idea where this was going to end. But then when the course ended, it was just like that light bulb just came on for me, and everything was just so certain. I was able to trust the uncertainty and the unknown until the end and to really know that this was going to lead up to something and to end somewhere.«

Sadie (5-6 years) described a connection between fear of uncertainty and being close-minded as well as fearful, and that before the course, she used to

be not open to ambiguity. As she reflected back on her course experience, she pointed out that she learned during the course how to become more open and less afraid of ambiguity as she pointed out

»Now it's kind of definitely open to ambiguity, just more open now than I was before the class. Even during the class, you would have us do some things and I was like, what the hell? What does this mean? What the hell? Come on. This is hard. And then halfway through the class I was like, I see. And now I look back and I go, this makes sense.«

She then described how her 'black and white thinking« has now migrated into the space of gray matter; ambiguity is good and things are rather grey and differentiated. She considers this as one of the most important learnings she took from the course as she explained

»Number one is grey space, grey matter, not ambiguity, not scary at all. If anything, it's needed.«

LEARNING NEW THINGS

Denise (7-8 years) spoke about consciously pursuing new things and practicing her curiosity as she points out

»Just this idea of wanting to learn new things, wanting to just always have a new goal or a new pursuit, not just for the sake of having one, but just there's something about not being stagnant and something about always wanting to learn new things or try new things or again, be super curious. That I would say I lean into.«

Denise continued by explaining that creativity is almost a spiritual thing where ideas are coming to her as long as she remains open and that she then can act upon and bring some of those ideas to life. She shared

»Because for me [creativity] it's also partly a spiritual process of allowing myself to be open to the ideas that want to choose me and my accepting of those ideas. And my pursuit of that is me kind of being creative and saying, okay, here's a concept, a thing that I've been given an idea and I get to create and bring it to life.«

Denise further explained that she is excited about learning and gaining a new understanding about the world and about herself, as she pointed out that creativity for her is

»An exploration of things that you're curious about, excited about learning more, wanting to try that also allow you to bring something to life, whether that's a physical thing or perhaps a, it's something like an awakening of something within yourself, like an understanding of yourself or an understanding of the world. This understanding and more understanding of yourself.«

She attributed this awareness and belief back to the course as she explained

»I think everything that we did [in the course] had an effect on that understanding of creativity and that it allowed me to learn more about myself, again, being more open-minded, creating more connections with other people, going on the solo and artist dates, being more curious about things. So, I've been able to learn more about myself through those experiences and connections.«

Sadie (5-6 years) spoke about how the course and her creativity have contributed to becoming more mature and more aware of her creative self. She explained that she is more open to new things, is less worried and applies a strategy of trial and error, experimenting with things she might like or dislike, as she explained

»I just think that as you become more open to things and you try more things and you try more things, you realize you like things, you don't like

things you can still be like, oh, I tried it, didn't like it, but cool. I respect if you want to do that.

After the course, she realized that she no longer needs to be the person she thought other people expect her to be. She associated a new freedom to be herself with creativity and uses her creativity to bring herself into the various scenarios she encounters in life with a consciousness and awareness of what and how she wants to be and what activity she might want to engage in, depending on the circumstances and independent of external expectations and pressures. With this new creative freedom and identity, she not only started to explore new things in her life, such as listening to and learning about classical music after the course, but also being aware of when classical music or pop music are appropriate for the mood she is in at any given time, as she said

»Post [course] I was like, okay, I mean I have to be myself, who is myself. So, then I was like, okay, that's when the whole, this is what I wear, this is what I don't wear, this is what I consume, this is what I don't consume. Is this what I want to listen to this music, not really change something else. Now I listen to classical music while I work, and sometimes then I'll listen to pop music while I work, but it used to just be pop only, nothing else. But now I'm like, oh, if I listen to classical music, I feel this way when I do something versus when I listen to pop, I can't focus. I listen to pop when I really want to get the date done. So, depending on the circumstances, that's when I'll grab one part of me or one thing I like and then bring it there.«

Risk-Taking | Risk-taking is another concept that emerged from the data analysis as a salient theme. While risk-taking is considered a personality characteristic of creative individuals and is related to creative confidence, curiosity, openness, being open-minded and accepting uncertainty,⁸¹ it illustrates another benefit associated with creativity training. The unlearning of

81 Plucker, Jonathan A., and Joseph S. Renzulli. Chapter 3 - »Psychometric Approaches to the Study of Human Creativity.« In *Handbook of Creativity*, edited by Robert J. Sternberg, 1st ed., 35–61. Cambridge University Press, 1998. <https://doi.org/10.1017/CBO9780511807916.005>.

previously known and accepted concepts and preconceived notions related to the definition of what creativity means and has been called a process of democratization of creativity as participants found a new understanding that they can be creative as well. This new understanding paired with creative confidence, openness and ability to embrace ambiguity allows one to take more risks.

Risk-taking is also related to being more adventurous, more daring and braver. Aristotle considered bravery as a virtue that allows humans to have a fulfilled life by learning from challenges and overcoming obstacles.⁸² Xiaomin (1-2 years) observed this bravery as a result from the course as she stated

»I've become more brave. I think it's a very first thing after if I took the creative course because I think creativity also needs people to be brave enough to be creative because as I mentioned, if I just stay in the same place or stay in my comfort zone, maybe I can still create new things, but my inspiration will be less. So maybe to try to be brave or try to step out the things I feel familiar.«

Bravery is connected with creativity and is grounded in feeling confident and being willing to take certain [calculated risks]. Charles (9-10 years) described how he associates his bravery with being different and being willing to share and express his different ways of thinking and being as he stated

»I would say bravery is that hidden word underneath creativity because not only, well, I think creativity is kind of when you take your instincts and you don't fall back, you don't connect to them immediately. You have the bravery to go against it or try something different. I think that part, when that part's realized, can elevate your creative thinking. You have the bravery to not just go for the riskier idea, but push against what you know and really challenge to see what you don't know.«

82 Meyer, Susan Sauvé, ed. *How to Flourish: An Ancient Guide to Living Well. Ancient Wisdom for Modern Readers*. Princeton: Princeton University Press, 2023.

Charles stated that this insight and learning has had a positive effect on what and how he presents his ideas to his clients in his professional setting, as he revealed

»I think it [the course] democratized creativity in a lot of ways. And I think with it, in doing that, unlocked some risk-taking for me, and it made me want to take more creative risks. And even just divergent thinking, just a quick exercise at the outset of a brainstorm or ideation session, even that little bit is more creative risk taking than I may have done before. And then, it goes all the way as far to taking a risk to put something in front of a client, or to sell something into a client and execute on it, and put it out in the world and take a risk, and hopefully see it work out to your objective.«

The ability to take more risks can go as far as becoming an entrepreneur and starting one's own business, particularly a business in marketing strategy and consulting where creativity and creative thinking can be highly valuable to clients, as Charles stated

»I've just recently started my own business, and that is something I've been increasingly interested in over the years. And I think because of that... Without the apprehension of taking that risk, I've been feeling like I can do this. And actually, the creative side of it is, I'm going to rely even more on the creative side of it than I would be if I was just working in an agency. Because I think that I will be relied on for more creative thinking and creative ideas in my business as a consultant than I would be if I was just working in an agency.«

Risk-taking can also take place in smaller aspects of personal and professional life and can lead to the confidence to speak up when dealing with managers in corporate settings. It can be associated with being more courageous, pushing the envelope and recommending new ideas, actions and insights despite the fact that they might upset the current state of affairs or the way things have always been done, particularly in professional settings.

Adam (9-10 years) described that it requires confidence and risk taking when he speaks up and proposes new ideas knowingly that people might not like his ideas. He stated

»It requires speaking up and saying like, Hey, I know we've done it this way, let's not do it that way. Which oftentimes people don't want to hear because they want the easy way out. And it is definitely a challenging part of the creative process to push people to do something they haven't done before because everyone's scared of something different until you're able to do it and then everyone loves it. So, to win people over is sometimes the hardest part because you have to throw out something undeniable, whether that's an idea or a picture or a slogan or a script that people can see that fit for themselves in a way that makes sense to them. That's the only way you can convince people.«

Companies, organizations and individuals interested in true growth and continuous development will appreciate the contrarian perspective that a creative thinker can bring to a project, process or life in general.

Alice (3-4 years) explained that after the creativity course, she moved to New York and started seeing some differences in how she approached her life. She remarked that her awareness increased and that she is more open to taking risks and that her creativity helps her be aware of and monitor who she is, what she does and where she wants to move as she explained

»I think just not, or being less afraid to take risks. Realizing that taking risks or taking risks is a necessary part of growth. And I think that relates to creativity. If you never try anything different, you're not going to get a different result. And yeah, I would say I overall am just more confident and intentional in how I move through the world and that definitely involves creativity as well.«

NEW PERSPECTIVES AND REFRAMING

Being more open, learning to experience new endeavors paired with creativity, creative thinking and creative process leads to the ability to see things from a new perspective. Creativity allows us to shift our lens, become less tunnel visioned and be able to shed new light on a situation or challenge and then reframe the situation and apply a different way of approaching the challenge. While it might take some practice to develop the ability of reframing problems and shifting perspective, this skill can become normal behavior and is applicable in different disciplines and life situations.⁸³

Sonya (1-2 years) explained that we are all influenced by our past experiences that guide our future experiences and our path forward. She realized through the course that creativity allows her to not remain stuck in her past experiences and that she is able to add something new to an already existing experience. She pointed out

»I think in a sense it's not that I can leave my experience on one side and then act as if I don't have any experience. I feel like that's impossible, but more, I think that the course really taught me that it is important to look at things from different perspectives and not just tunnel in your experience. So, I think the course is just a reminder of to keep doing that and to keep flexing that muscle. And like I said, not tunnel within one perspective, but try to look at things from different perspectives.«

This openness and ability to change perspectives and add a new angle is increasingly important in business settings when established procedures, processes and ways of doing business might no longer suffice to deal with and address changes. We are seeing this and will see this as technology will play a greater role. While focusing on the task at hand is important, sometimes it helps adding a new set of eyes and gaining a new perspective.

83 Nickerson, Raymond S. Chapter 20 - »Enhancing Creativity.« In *Handbook of Creativity*, edited by Robert J. Sternberg, 392–430. Cambridge: Cambridge University Press, 1998. <https://doi.org/10.1017/CB09780511807916.022>.

Gaining new perspectives, reframing a situation or problem and seeing things with a different set of lights can be practiced by being aware of one's routines and consciously adding something new or changing things up. Hana (7-8 years) described how she adds small creative acts throughout her life in order to practice this perspective shifting ability as she explained

»I kind of try to stay where I am and I don't want to change that much about my life or stuff, but I always try to keep in my mind it's like, oh yeah, I want to be more active and creatively active in my life. So, it's the same thing whenever I walk to, or whenever I go to my office or something, I try to take some different courses to see some different views and stuff and intentionally try to keep it, take some changes so that I can see different views and be more exposed to the creative environment and stuff like that. That's also what I learned from the class. It's like I always take some changes and take some risk to be exposed to the new environments and stuff like that because I always think staying in the same space, same area makes me feel like less creative.«

The ability to think differently, to gain new insights and to apply creativity and the ability to add a different perspective to work when one recognizes that a situation, a process or a product can be improved upon, is described by Hunter (3-4 years), who described how she took inventory of medical product stock in her company's warehouse and that she realized that something can be improved there, as she describes

»Recently I did an inventory that I do annually and it's two plus eight-hour days of just going and counting. And this year I was tired of the warehouse. I was tired of the way it was laid out. I was tired of the way the boxes were. And so, I really thought to myself, how can I make this better? And I tried thinking about all the different approaches and I brought my own angle to it. And while some people wouldn't think that that is creative, I would say it is because you have to think about how can it be optimized, how can it be better? What are all the different ways that I could do this? And it reminds me a lot of the time of the things we did in your class, you have to think outside the box. You have to think sometimes if something's not working, how do I make it better?«

Hunter (3-4 years) connected this ability with the notion of untraining our brains and unlearning as well as recognizing the mental barriers that surround us and how to break away from those as she added

»I guess the overall thing is untraining your brain we're so habit based and we're stuck in these cycles that we don't even realize we're stuck in. I guess breaking the cycle and unlearning your habits is just so important to creativity because you can't be your best self if you're keeping yourself in a loop and doing what's easiest.«

Hunter summarized this concept by saying

»I think the main thing is you need to unlearn your habits and to find ways to be different in yourself. And when you can do that in combination with your creativity, you can really flourish in the space.«

Helping others to see things differently and to actively look for different perspectives as well as reframing a situation and allowing others to see things in a different light when working on projects and solving client challenges is another ability closely related to creative thinking skills as Sage (9-10 years) pointed out

»I've gotten this feedback a lot where I am able to listen to what the client wants or what their feedback is and be able to reframe it back to them in a way that makes them feel confident that we're either we have the solution or we're going to get to a solution. And so, it's kind of like, I guess a listening technique. A lot of times I'll be on calls with my team and they're younger, but the client will ask something or say something and they won't know how to keep moving on in the conversation. They'll just be like, oh, oh, okay. And then I have the ability to take what they're saying, reframe it back to them, and then get us to the next step.«

Sage (9-10 years) described that in her professional field, this skill of thinking differently and being able to reframing situations and problems is more important than deep knowledge within a specific industry as she has worked with clients in many different industries. She explained

»I have worked across all different industries. I worked for pharmaceuticals, video games, alcohol, cranberry de Comcast, business, telecommunications, and actually none of that mattered. What mattered was my ability to problem solve with both clients and the team. And that's made me successful. Not my deep understanding of the video game universe, but my ability to connect with people and also think differently.«

Reframing is a highly sought skill in professional settings as companies are in need to challenge themselves, their product and service offerings and the way they are and have been doing things in the past. Himani (9-10 years) spoke about the feedback she receives from her superiors and how her creativity and her ability to reframe a situation or challenge is being appreciated and acknowledged as well as highly valued as she explained that her ability to see the big picture as well as the detail and then being able to see different and new connections is being noticed as she explained

»So, we get feedback every quarter. And typically, what I've tended to see in those is around the ability to identify patterns and gaps, macro and micro in ways that few people think at a systems level. And again, I think that's another advantage of being a creative thinker; and having roots in a [creativity] course like the GMCA is the systems thinking aspect of it. Looking at the bigger picture, stepping back to see, is what we're building making sense at a product or portfolio level rather than just at a feature or task level.

It's that I often think of that that six blind men, elephant example, if you're not a creative person and you're not thinking at a systems level, you're going to be one of those six blind men. So, it helps you step away from that. And that's something I've seen come up in my feedback a lot is the ability to ask a lot of questions even at the risk of sounding dumb,

because I've never worried about that. I'm like, okay, so tell me more why think of me as a five-year-old explain this like you would to your child? Because often the more you push around those, the more clear it is where things break down and then it helps you identify those gaps.

And most people are really scared to ask those questions. But if you preface it by saying, you know what, I'm not the expert of this and I'm very comfortable not being the expert of this. My job is to kind of understand what problems are we actually trying to solve. And to do that, I'm going to ask a lot of questions then that helps you kind of reframe that quite dramatically.»

Creativity has become a driving force not only in her personal life but also influences her professional environment as she realized that her creativity is not only being valued by others, but that she can use her creativity to solve problems, see the big picture and create a vision for professional goals she would like to achieve and then be an active agent who makes the next move in her journey to pursue those dreams, as she explained

»Climbing the corporate ladder, having a couple of different positions, being promoted and then realizing that I actually want to make a career change because of, I want to get into product management. And I think that one of the main reasons is, it allows you to be super creative and solve problems, but also analytical. And I do think that being able to exercise creativity and have these ideas without doing film, creative design, something is the role for me. And it's more, take this idea, make it, put it out there, make tweaks to it. That is so cool. So, I definitely think that my value of creativity and how much it means to me is that driving force with this career change and realizing, this is what I want to do. So glad I got those promotions and had those different experiences, but ready to take all that and move to the next level in a new career that allows me to be even more creative.«

The Journey and Continuous Growth | Personal growth, the passion for learning in general and for learning new things are aspects of one's creative lifelong journey that are related to openness and being open-minded.

Timothy (7-8 years) spoke about his own creativity in the sense of being on a journey that will never stop as he continues to learn more about everything related to creativity and to further develop himself. He explained

»For me, my own creativity, I feel it's a journey and it still continues it, it never stops. And [creativity] it's one of the rare subjects where you continually learn and you apply the process yourself. You are not just going to be pigeonholed into one creative process. You will continually learn throughout your life and it is one where you will never get bored, you will always be challenged, you will always want to learn more as you go through it throughout your life.«

Anna (5-6 years) spoke about how the course has helped her apply her creativity and made her aware of her creative life journey. She considered herself just at the midpoint and knows that there will be much more growth in her personal and professional creativity. When being asked »what thoughts or feelings do you have about your own creativity?«, she responded

»I am way more positive and more aware about creativity, not just as an occurrence, but as a result of systemic training and commitment and awareness. So that is one, I think of myself as in a middle point of a journey that started with understanding creative thinking, understanding the design behind it, understanding it as a concept and not just as a mythical value or not as a mythical trait or characteristic. I think I am in the middle of the journey because it was hard at first. It was hard to build a habit around it. It was hard to integrate it into my life as a constant force and not just as a, oh, I learned something really nice, let's try it. So, getting over that barrier was hard to really believe in it and build it into my life. But the good thing about it [creativity] is the more I practice it and the more I practice it, the better results that I receive, but also the more opportunities that I see being opened by that. So, it is hard to start good results, but then it opens so much more opportunities.«

While being on her creative journey, Anna (5-6 years) sees creativity as a process that allows her to accomplish things in life but also find meaning in life. Creativity helps as a navigation tool on the creative life journey representing the previously mentioned powerful force as she described

»I don't think creativity is a result because simply I do not have a good way of defining it. I see it as a tool. I see it as a powerful tool for me to find to accomplish what I want in life, but also to find meaning, find purpose, and find inspiration in life. And then, what I describe as a journey is more about the journey of my personal growth journey, that creativity is now a propelling force that drive me through that journey. I do have aspirations and I do have things I want to accomplish, but I would not consider them as goals because I truly believe that with that creative thinking and with creativity in my life, it's going to be ever morphing. I'm sure that next month or next year or next five years, things going to change again. So that is something that I see that in self-improvement and in my growth journey, creativity is definitely a propelling force that helped me move along, helps me adapt and help me deal with changes or uncertainties or ambiguity.«

She used the tree analogy to describe her continuous growth and creative journey as she pointed out

»I think that a tree analogy is probably going to be the closest analogy to describe my growth and creativity is kind of the soil that nurture that tree. But my perception of creativity is also growing. So, the soil is not concrete, it is changing as well, and it becomes more powerful and more and more powerful. And I am also actively looking for ways to make that soil, to make that material more powerful.«

The concept that creativity can be a driving force and a powerful tool for personal development is expressed by Hunter (3-4 years) as she explained that her creativity helps her to be herself and to constantly assess where she is

in comparison to the previous version of herself as she is self-aware and conscious of her work, her creativity and herself as she pointed out

»I could be in any field I wanted, because if I'm able to be myself, someone somewhere is going to value my ideas. And if my ideas are being valued, then that is okay. And if my ideas are being challenged, that's even better because I can't stay stagnant. I can't always, like I said, do what is comfortable or do what is easiest, because if I'm doing that, then I'm not really growing. And I think that there needs to be a certain amount of growth in you in order for your creativity and innovation to flourish. You need to be able to be different than the person you were a week ago, a month ago yesterday.«

She continued by adding that her creativity allows her to try new things despite the fact that she might fail at some as she explained that everyone thinks differently and that those differences can help everyone and ourselves to grow as she explained

»I don't think the same way you think, you don't think the same way another person thinks. We're all unique and I love to unbox the potential in each individual's creative thinking and my own and see how they mesh, see how they don't see how we can really push ourselves. I love, it's my biggest thing, I can always be a better version of myself. I can always do something differently. I can always learn from someone. And I think for myself, creativity is a big part of, it's that willingness to fail and the willingness to try.«

Jason (5-6 years) sees creativity as a tool to push himself personally and professionally and to make new connections in all aspects of life. He described creativity as something quite complex and sees it as a web of infinite possible connections as he pointed out

»Definitely to continue to pushing yourself outside your boundaries and to continue to learn and create connections and to think about things,

it's just one big web. Everything's related to everything in some way, and if they're not, maybe it's your job to create a connection, so to continue to do that and to absorb things that are creative or maybe absorb things that aren't creative to see how maybe it could be better. Super important.»

Creativity is also seen by the majority of participants as limitless as the 'sky is the limit' and having the freedom to just go on lifelong journey of growth. Darika (7-8 years) expressed this as she said

»I feel like [creativity] it's very refreshing because I feel like the sky is the limit. I think that there's no end to it. So, whether I'm choosing a color for my wall, whether I'm finding a new artwork, whether I'm building a music set for my next gig, whether I am writing a report on the budget in India, I think that there are different ways to do it. I think that I'm a bit more fearless, I think. I feel like I have access to creativity. I feel like I am creative and I feel like there's just a more free flow of how I work. Earlier [before the course], I'd work within a little bit of a box. I'd be a little bit constrained, but I think now I'm entertaining all the ideas and that's reflecting in my work.«

Creativity meant a lot to all participants in the study and the data revealed that creativity is an important factor leading to continuous growth and life-long journey as Ivan (9-10 years) summarized

»I mean, [creativity] it's huge. I mean, I don't know any other way to say it. I mean it feeds into every component of my life. Again, personally, professionally, it's infused into everything for sure. I can't imagine a life of any kind without creativity. It would be a dull existence. So yeah, it, it's weaved in every part of my lifestyle and it is basically the key to life and continuing to love and grow and thrive until my time is up here.«

Sage (9-10 years) supported the idea that creativity is related to the desire of continuous growth as she pointed out

»I think the way I tackle problems is so inherent to who I am. I never just, I'm not like oh one and done; I am constantly evolving and wanting to get to the best something can be. And through that process, it's trying out different ways of doing things or thinking through different approaches to things, whether it's with work or in my personal life.«

She added that she has tried new things and started new hobbies, and that creativity is part of everything she does as she pointed out

»I really like trying different things and things I've never done before. So doing a flower arranging class or working with someone on an event design or I think getting perspectives from other people and trying things I've never done before then make me more creative in my own life. I can kind of apply whatever that experience was to things I'm doing elsewhere. I mean, I definitely find, even in my work with brainstorming things, I'll be like, oh, I tried this weekend. What if we put a spin on it for Microsoft and made this. We do a lot of silly things, but I can see them kind of bleeding into each other. Just trying different experiences allow me to be creative and even some of the more bland areas of my life, like running client status.«

Creativity can help us push boundaries and explore avenues or roads we would normally not consider taking. Creativity helps us engage in new experiences and learning from those experiences continuously over a lifetime, as Timothy (7-8 years) pointed out one of the key take-aways he took from the course

»I think one of the big ones is I always, always seek to learn, always try and push boundaries that you have within yourself. So always be open to new experiences, always embrace new ideas, new thoughts.«

Andrew (1-2 years) described that his creativity has grown since the course and he considers himself on a journey that will continue as he said

»I feel like my creativity has definitely grown more since taking the course and shown a lot more on me externally after taking the course. But yeah, I still feel like there's more room to go for sure, but I think there's always just going to be more room to go. But I feel like after taking the course I have taken a good leap from where I was before and especially being in this industry and having all these people, I'm surrounded within the industry, my creativity is definitely feeling stronger and I'm excited to see what else I can and have to offer creatively.«

Shayna (1-2 years) shared a final thought that creativity should be taught more and that participating in a creativity course helps us identify who we are and helps us move actively forward in our life journey as it exposes us to new concepts, allows us to unlearn and find a powerful tool in creative thinking and creativity to push our personal boundaries as she summarized

»No matter how creative or non-creative you think you are, I think taking a course or a class that, or just being in a space or a program that pushes your creativity, I think is important. Important because there's always room for growth. We don't all know everything. We haven't all reached our full potential. And so, I think it's important that at some point in our lives, we take something that really pushes our creativity and takes us out of our comfort zone because the world does need creative thinkers. The world does need people who are willing to explore the boundaries of what is and what isn't. And so, I guess those would be my final words that if I can even continue to make sure that I attend or just be in a space that pushes my creativity as much as possible, I will do that. I think it's very important.«

The data analysis and the themes that emerged from the study demonstrate that creativity is highly complex and happens in multiple systems. Additionally, numerous interrelated components are at work and at play, and reflect that creativity is experienced by all participants as an individual long-term journey.

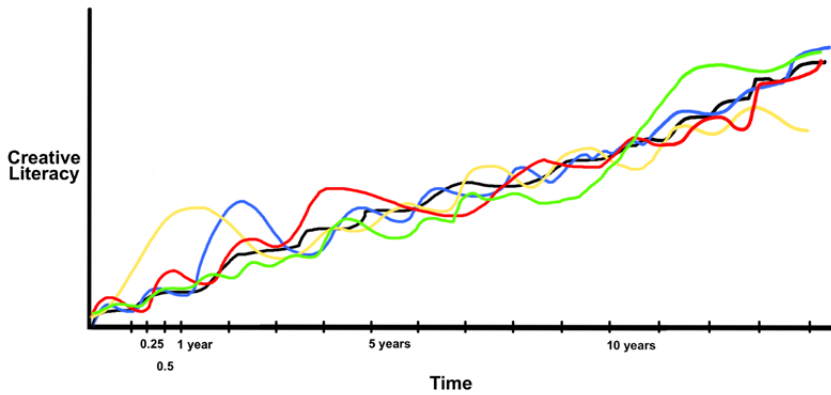


Figure 5-10. Development of Creative Literacy – The Journey. Illustration by Alexandra Vogel.

While many themes that emerged from the data analysis correspond with and confirm existing creativity models and frameworks as outlined in Chapter 2 – Literature Review, the results of this study provide new insights into how these models are being experienced from the perspective of those creative individuals who participated in the creativity training.

All participants of the study experienced creativity as a complex subject in a holistic way. During and after the training, creativity-related themes such as cognition, process, collaboration, personality traits, self-efficacy, open-mindedness and confidence, among others, were not experienced insular and isolated but within a humanistic and inter-connected perspective. According to the data analysis of this study, the following six themes are intertwined, correspond and influence each other, and provide a framework representing creative literacy:

- being conscious and aware of one's creative abilities (The Conscious Self)
- having a strong belief in one's own creative competencies (The Creative Self-Identity)
- understanding the separation of creative process and creative product and internalizing the creative process (The Self as Process)
- expressing empathy for oneself and others (The Socio-Emotional Self)
- having the capacity to collaborate with others (The Collaborative Self)

- being open to new things and applying a growth mindset represented by continuous learning and developing oneself, allowing for a rich creative life journey filled with many possibilities (The Developing Self)

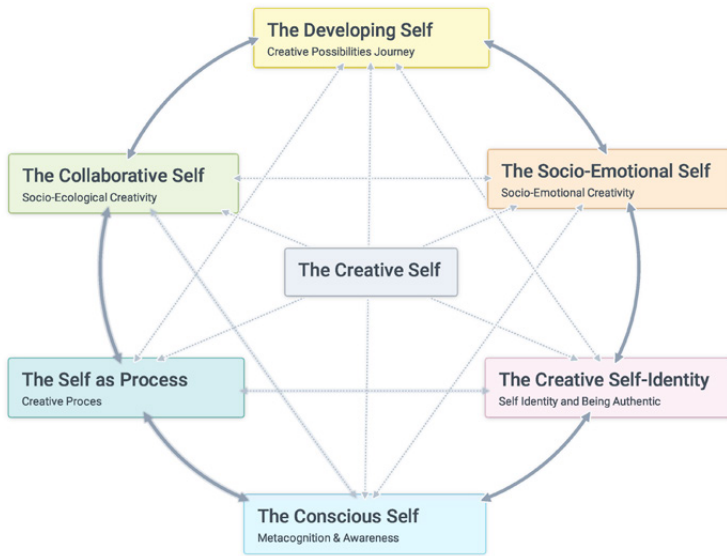


Figure 5-11. The C-SPECD Framework illustrating Six Dimensions of Creative Literacy.

A more detailed conclusion, several limitations and ideas for future research are covered in the next chapter.

CHAPTER SIX: CONCLUSIONS

Arriving at the conclusions of this dissertation allows me to reflect on the journey I have begun by investigating if there might be any long-term impact of creativity training, in this particular case, a college-based course in creativity, creative thinking and creative process. While I considered myself somewhat knowledgeable in the area of creativity training prior to the start of the research project, I could not have foreseen or guessed any of the results that the research project brought to light.

While there is much agreement that the nature of creativity is complex, the findings not only confirmed existing research that a creativity course can greatly influence anyone in a positive way who partakes in a creativity training in many different ways, but it also brought to attention the fact that the take-aways and benefits associated with creativity, that participants identified and associated with their personal and professional creativity, are interconnected and impactful for a long time after having participated in the training. The uncovering of the strong relationship of the six main driving forces that have been presented in the form of the C-SPECD framework (Conscious Self, Socio-Emotional Self, Process Self, Creative Self, Collaborative Self, Developing Self) illustrates the richness creativity training can provide participants with. The findings are a testament to the fact that creativity, the human experience and teaching are all holistic in their nature, and that creativity training should embed a holistic viewpoint. Further, the six main themes that emerged from the data analysis and are presented in the C-SPECD framework, indicate a creativity skill set that can be described as creative literacy.

According to the data analysis of this study, creativity training can change a person's mindset, develop creative literacy and provide a navigation tool for personal and professional applications in life. Within the right circumstances and openness from the participant's perspective to engage and »lean into« a creativity training in the first place, creative literacy can become one of the most powerful tools that people can acquire and practice on a regular basis for a long time.

The findings allow us to see that once recognized, there was no way of putting the genie back into the bottle or putting the cork back on the cham-

pagne bottle. The energy, learning and cognitive shifts that were unleashed during creativity training led to new perspectives, to an increased openness to explore life and to engage in things unknown, and to taking more risks and being more comfortable with ambiguity and unknown situations and scenarios. When practiced on a regular basis, creative literacy, as represented by creativity and creative thinking, can be considered a group of muscles that are influenced by multiple facets such as nutrition, diet, training programs and the way the individual feels at any given time of the day. Even the location and mental state of mind, the environment and the people around us will influence every bit of our individual creativity as we are moving forward on our life journey. Creative literacy then becomes its own organism that is flexible, in constant flow, and might change and grow for a long time.

Drawing a connection to physical exercise programs, as well as nutritional and diet programs, and adapting concepts and slogans such as »activity for a healthy life«¹ can show us that creativity, in connection with creative literacy, is not a singular event but something that is highly complex, and that »creativity for a healthy life« might earn some future attention. As creativity and creative thinking, in form of skill sets, move up the ladder of highly desired skills in humans and employees, creative literacy and creativity training will increase in importance.

The findings have also shown that the participants of this study interact with others more openly and are more willing to work towards a common goal when creativity is at play or at work. The study also showed that for the participants, creativity is a common language that allows them to communicate more efficiently and more humane with each other.

1 Karvonen, Martti J. »Physical Activity for a Healthy Life.« *Research Quarterly for Exercise and Sport* 67, no. 2 (June 1996): 213–215. <https://doi.org/10.1080/02701367.1996.10607946>.

RESEARCH CONTRIBUTIONS AND IMPLICATIONS

ACADEMIC CONTRIBUTIONS

This research study sheds light and adds a new perspective onto what individuals, who have completed a creativity training, make of the training in the first place, and illustrates with rich data how the process of learning about and experiencing the subject creativity shows up over an extended time after the training took place. While this study did not focus on any specific aspects such as personality traits, environment or divergent thinking skills, it provides a holistic perspective into how participants processed the subject creativity and how it presented itself at different times and in various places throughout personal and professional settings in life situations. The findings from this research study demonstrate that the development of valuable creative thinking skills such as divergent and convergent thinking, empathy, flexibility, curiosity and life-long learning are linked to deliberate creativity training.

Forgeard and Kaufman point out that »creativity scholars tend to focus on what leads to creativity« and that »there is little in these studies to convince a nonbeliever that creativity is worth investment.«² While this research did not seek to measure any specific dimensions of creativity trainings such as divergent thinking skills, problem-solving skills, collaboration or the creative environment, it examined the process when a human subject experiences the subject creativity during and after the creativity training with a holistic lens.

The C-SPECD Framework consisting of the six personal dimensions Conscious Self, Socio-Emotional Self, Process Self, Creative Self, Collaborative Self, Developing Self, as well as the six creativity dimensions Creative Self Identity, Metacognition and Awareness, Creative Process, Socio-Emotional Creativity and Creative Possibilities Journey illustrate the value creativity training can spark and develop in humans. All six factors represent a number of core skills that can be summarized and described as creative literacy.

Creative literacy consists of a strong sense of one's own creative competencies, the capacity to collaborate with others, express empathy for oneself

2 Sternberg, Robert J., and James C. Kaufman, eds. *The Nature of Human Creativity*. 1st ed. Cambridge University Press, 2018. <https://doi.org/10.1017/9781108185936>.

and others, be open to new things, apply a growth mindset represented by continuous learning, and developing oneself while allowing for a rich creative life journey filled with many possibilities. Additionally, creative literacy entails an understanding of the creative process and the separation of creative process and creative product. This holistic aspect of the study provides a glimpse that creativity training can result in a positive and monetary return on investment, in academic and educational environments as well as in corporate trainings.

Corporate training programs and college-based course focusing on creativity and creative thinking have grown in popularity in recent years and research studies have unveiled the correlation between training and changes in creative confidence, openness and improved divergent thinking skills³. Burnett and Fitzgerald argue that there is a growing need for infusing creative thinking into higher education, and they provide a number of helpful tools that teachers can embed into their coursework to increase creative thinking skills in students.⁴ Under these circumstances the findings of this study become more relevant.

The empirical data confirms that there are strong positive relations that occur during a college-based 14-week long systematic creativity training. As many societies and cultures are still holding on to previously established myths, judgments and preconceptions related to creativity, formal creativity training leads to a new understanding of what creativity means. This shift of thinking paired with an increased new-found confidence and self-identity leads to an epiphany, a spark and an unleashing of thoughts and positive energy that can have a long-term effect on personal and professional life aspects of those individuals who participated in the training.

The research findings have practical implications for educators, academics and business professionals as well as individuals, who are interested in developing creative skills, advance human development and promote creative literacy, skills, which will be in high demand for many years to come.

3 Habib, Sabrina, Thomas Vogel and Evelyn Thorne. »Transformational Creative Pedagogy in the Age of AI: A Multiyear Qualitative Analysis Across Universities.« Presentation at The South Oregon University 2024 Annual Creativity Conference, Ashland, OR, May 2024.

4 Burnett, Cyndi, and John Fitzgerald Cabra. *Infusing Creative Thinking into Higher Education*, 2024.

Last but not least, to my knowledge, no qualitative studies are available that illustrate any potential long-term impact that might result from the process of learning and practicing creative thinking skills in a course. Adding more qualitative research projects to the mix of creativity research in order to add new perspectives to existing quantitative studies and studies, that explore how creativity and creative thinking skills can be enhanced, has been voiced by creativity researchers⁵. This study fills a knowledge gap and provides new insights into how creativity training, in particular a 14-week-long creativity course impacts the life of people, who completed such a course, and how creative literacy can be developed.

DIDACTIC CONTRIBUTIONS

The C-SPECD Framework consisting of the six personal dimensions Conscious Self, Socio-Emotional Self, Process Self, Creative Self, Collaborative Self, Developing Self, as well as the six creativity dimensions Creative Self Identity, Metacognition and Awareness, Creative Process, Socio-Emotional Creativity and Creative Possibilities Journey provides educators and corporate trainers, who are involved in the development, teaching or assessing of creativity courses and creativity trainings, with a holistic model outlining key aspects that can contribute to learning outcomes with long-term impact. The individual dimensions presented in the C-SPECD framework allow educators, policy makers and corporate trainers with topic areas that should be incorporated into successful creativity training programs. While the research findings emphasize the holistic character of creativity training, the distinct components of the framework can be further adjusted and receive special attention based on expected learning outcomes, skill levels of the trainer and the temporal as well as physical environment where the training takes place.

While the term 'Creative Literacy« is not new, the findings of the research can advance the development of creative literacy on a broader level and promote the concept that creative literacy should be developed on a large scale to enhance creative thinking and build skills related to creativity among a wide

5 Özyaprak, Melodi. »Revealing Creativity: Exploring Success Components via Research and Experience.« Keynote Presentation presented at the Creativity Expert Exchange 2024, New York, NY, US - Virtual, March 1, 2024.

audience of students of any ages. Creative literacy can also help identify key aspects that can be incorporated into the development of creativity curriculum and training programs, and help meet the increased demand for creative thinking skills as expressed by educators, business professionals and described in—the in the World Economic Forum - Future of Jobs Report 2023.⁶

Additionally, the findings can also be applied when developing learning outcomes or building assessment tools to provide students and participants in creativity trainings with the ability to gauge their level of creative literacy and how they self-identify with each of the C-SPECD framework's dimensions. As shared during the discussion, I am proposing the development of a tool that is based on the C-SPECD Framework and allows anyone to check in how and at what level they consider themselves on the six different dimensions of the framework. A measurement or assessment tool should not be considered an absolute tool like the Torrance Test of Creative Thinking, the Alternative Uses Task (AUT) test or any other creativity assessment tool, but provide a tool for self-reflection that allows taking a snapshot at a certain time and place without receiving a score card. Creativity training is not about absolute measurement but about understanding the complexity and interconnection and valuing the relative power of creativity and building life-long creative literacy.

RESEARCH LIMITATIONS

While the study investigated any perceived potential long-term impact creativity training might have on students not only right after the course completion but also many years after the course and the training took place, the participants of the study were all former students of mine. This could be a potential limitation because other trainers might have a different teaching style or use different content in their courses.

While the participants in the study represent a fairly diverse group of individuals, they all attended a private college in the United States and paid for an education that required some significant financial investment. This could

6 World Economic Forum. Future of Jobs Report 2023. 17th ed. WEF Insight Report. Geneva: World Economic Forum, 2023. <https://www.weforum.org/reports/the-future-of-jobs-report-2023/>.

mean that the research findings are not applicable for a broader audience who is unable to afford such creativity training. However, based on other research referenced in the literature review and the discussion, the study's results are cohesive with previously conducted studies on short-term benefits of creativity training across different times and locations.

Another possible limitation of this study is the fact that several participants chose the creativity training as an elective course and therefore might have had a positive pre-disposition to creativity prior to the course. However, the study results show no significant differences between those participants who took the creativity course as an elective course versus an obligatory degree requirement.

DIRECTIONS FOR FUTURE RESEARCH

The findings that emerged from this research suggest numerous opportunities for future research. First, the holistic framework C-SPECD that describes six personal dimensions – Conscious Self, Socio-Emotional Self, Process Self, Creative Self, Collaborative Self, Developing Self, as well as the six creativity dimensions Creative Self Identity, Metacognition and Awareness, Creative Process, Socio-Emotional Creativity and Creative Possibilities Journey – demonstrates the value creativity training can have for humans over an extended time period. However, due to the lack of other qualitative studies that focus on the long-term impact of creativity training, more studies should be conducted to investigate if similar results can be found.

A second opportunity for future research arises from the C-SPECD framework and suggests that future research investigates concepts, themes and subcategories associated with each of the six personal dimensions as well as the six creativity dimensions. Further research could identify specific parameters and constructs associated with each dimension and lead to an assessment tool that allows individuals to self-check their knowledge level or competency of creative thinking skills. Such an assessment tool could also provide educators and trainers with an opportunity to help students and trainees to gauge their creative skill level at any given point and help further develop those skills over an extended time period.

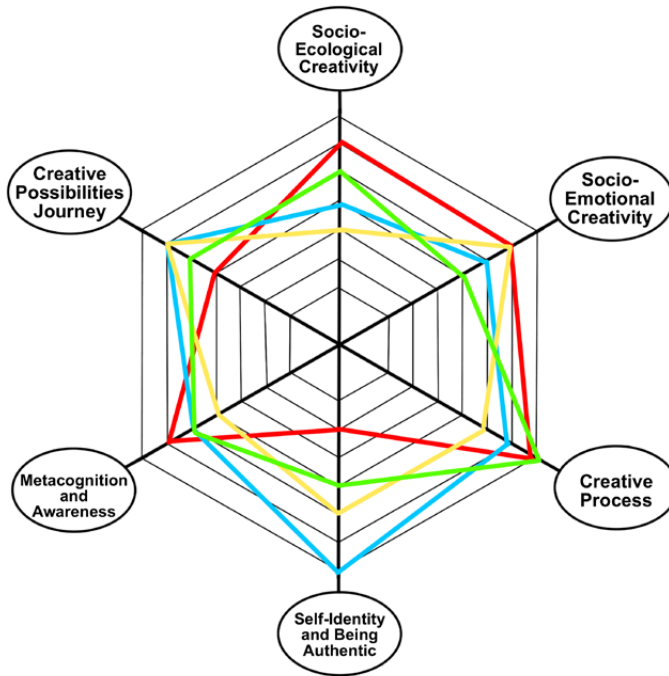


Figure 6-1. The C-SPECD Framework illustrating Six Dimensions in form of a potential tool for gauging Creative Literacy – Spider Web Model – Graph. Illustration by Alexandra Vogel

A third research area emerges within the context of the concept ‘Creative Literacies’. While several literacies such as math skills, reading, ethics, creative writing have been developed and formally established in K-12 and higher education, creative literacies could be further investigated and developed. In addition to the existing creativity literature, the C-SPECD framework provides some new insights that allow for further exploration of the key components of creative literacy.

Lastly, as many different factors and pedagogical models have been identified to enhance creativity in people of any age and not a single standardized process and approach of creativity training has been identified yet, future research could explore what other subjects and methods might be added into the mix of creativity training to investigate the most appropriate way of building creative literacy in as many individuals as possible. As this study applied

a certain approach and framework to teaching creativity, creative thinking and creative process (see Appendix 4 – Syllabus), there is an opportunity to conduct further research to explore additional components, such as movement, embodiment, acting, music and others, and to study how they can all be incorporated into a holistic way of creativity training.

As much of creativity research has focused on multiple individual facets, such as personality traits and divergent thinking skills among others, and since no long-term study is available that provides insights into the process of learning creativity as well as the process of living a creative life, I hope to add some significant new knowledge to the body of creativity research. Kaufman and Sternberg express a greater need for positive creative thinking in the world as they said »We argue that future scholarship needs to continue to address how we can encourage positive creative thinking to flourish and be accepted.«⁷ I hope that the work presented in this research answers their call and will lead to a better understanding of the power creativity training can bring forth and that more teachers, places of education as well as corporate departments of human development employ more creativity teachings to empower as many people as possible.

CLOSING THOUGHTS

While being creative and living a creative life can be bumpy and challenging at times, creativity and creative skills provide multiple navigation tools allowing us to check in with ourselves and the world around us. As long as we can build and strengthen confidence and understand that creativity is guided by a process that we actively live and embody, we can believe and trust the process without being too much concerned about the past and the future. The process allows us to focus on the present and being present in everything we do. Living a creative life most likely will not be a life lived in a straight line. With many stops, pauses, different directions and roads we might take along

7 Kaufman, James C., and Robert J. Sternberg, eds. *The Cambridge Handbook of Creativity*. 2nd ed. Cambridge University Press, 2019. <https://doi.org/10.1017/9781316979839>.

the way, our creative lives will illustrate that we are always in flux and willing to explore, change and adjust as we see appropriate.

As the world is getting more complex, creativity provides us with the much-needed confidence to be our authentic selves. Although no one can live their life on a completely blank canvas as we live in a complex network of diverse groups, organizations, cultures and societies, we can use our creativity to decide when to fit in and when to fight a creative cause to change the world for better, independently if our ideas fit into previously accepted models and frameworks or not.

In times when higher education at large and specific course topics are being challenged and questioned and constituents ask about the return on investment (ROI) of higher education, the study also provides some insights into the perceived value a course in creativity and creative thinking might create and provide. As this study focused on the perceived long-term impact and changes that might occur because of creativity trainings, investing in more trainings will very likely produce greater returns over a long time.

Last but not least, I wish that everyone can see the creative journey ahead of themselves and that the journey is more important than the end goal. In this line, I will also add that I wish for more creativity to be lived and expressed and less creativity be measured by different assessment tools that might capture only a small fraction of the complex system of being human.

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APPENDIX 1

INVITATION TO PARTICIPATE IN THE STUDY

Contact: via email

Subject line: Invitation to participate in a study related to creativity

Dear XXX,

I hope you are well. I am one of your former professors at Emerson College and leading a research project about creativity, and I would like to ask you to participate through a video-recorded Zoom interview.

The research investigates if there are any connections between the creativity course, e.g. [Breakthrough Thinking] or [Creative Thinking and Problem-Solving], you took some time ago while you were a student at Emerson College and your professional and personal everyday creativity. Topics like the creative process, creative place and the many aspects of individual creativity that were covered in the creativity course will guide our conversation.

You have been randomly selected from a list of former students. By providing your expert insight you could greatly contribute and help fill a knowledge gap in the area of creativity research.

Please let me know if you are interested and if you have any questions.

I look forward to hearing from you and to your participation in the study.

Best,
Thomas Vogel
Professor

Emerson College
Department of Marketing Communication
120 Boylston Street
Boston, MA 02116-4624

APPENDIX 2

GUIDELINES FOR PARTICIPATING IN THE STUDY

Dear Participant:

You are being asked to participate in a study being conducted by Thomas Vogel, marketing communication professor at Emerson College in Boston, MA, who has conducted past research on how creativity occurs in advertising agencies and how students can learn and enhance creative thinking skills.

What are some general things you should know about research studies?

You are being asked to take part in a research study. To join the study is voluntary. You may refuse to join, or you may withdraw your consent to be in the study, for any reason, without penalty. You don't have to answer any questions you don't wish to.

Research studies are designed to obtain new knowledge. This new information may help people in the future. You may not receive any direct benefit from being in the research study. There also may be risks to being in research studies.

Details about this study are discussed below. It is important that you understand this information so that you can make an informed choice about being in this research study. You will be given a copy of this consent form. You should ask the researchers named above, or staff members who may assist them, any questions you have about this study at any time.

What is the purpose of this study?

The purpose of this study is to understand the process how creativity "happens" and how creativity and creative thinking skills can be learned and practiced long after having participated in a creativity course.

How many people will take part in this study?

If you decide to be in this study, you will be one of up to 20 people in this research study, which is being conducted via Zoom interviews. All partic-

ipants were chosen from either a list of former students or a list of creativity conference participants.

How long will your part in this study last?

Your participation in this interview will last approximately one to two hours.

What will happen if you take part in the study?

You will be asked to share your expertise about how creativity “happens” individually and/or in your organization. The interview will be audio and/or videotaped so that it can be transcribed and then analyzed. Your name will not be used in any transcription or analysis.

What are the possible benefits from being in this study?

You may benefit by expressing your opinions and reflecting on your personal everyday creativity if these opinions and reflections help you make positive changes. You may not benefit personally from being in this research study. Research is designed to benefit society by gaining new knowledge.

What are the possible risks or discomforts involved from being in this study?

There are low emotional or physical risks to participants of this study. You may feel uncomfortable or embarrassed answering some of the question. You may refuse to answer any questions or end your participation at any time.

How will your privacy be protected?

Every effort will be taken to protect your identity as a participant in this study. You will not be identified in any academic report or publication of this study or its results. Your organization will not receive results that identify your individual participation in this study. Your name will not appear on any transcripts; instead, you will be given a pseudonym, or fake name. The list that matches your name to your pseudonym will be kept as an encrypted file on a secured and encrypted computer drive.

Will it cost you anything to be in this study?

There are no costs to participate.

What if you have questions about this study?

You have the right to ask, and have answered, any questions you may have about this research. If you have questions or concerns, you should ask the researcher at any time during the study or after it concludes. You may also contact Thomas Vogel at Emerson College. He can be reached at (617) 824-8285 or thomas_vogel@emerson.edu

What if you have questions about your rights as a research participant?

If you have questions about your rights as a research participant, you may contact the Emerson College Institutional Review Board (IRB), which is concerned with the protection of volunteers in research projects. You may reach the Chair of the IRB by e-mailing human_subjects@emerson.edu.

APPENDIX 3

INTERVIEW PROTOCOL USED IN THE STUDY

1. Could you please tell me everything that is involved in you having experienced the creativity course and how your life went on since then? [I will listen and make some notes and I will not interrupt you until you have finished. Please take as much time as you feel necessary and tell me all the details you remember that, in your opinion, are connected to having completed the creativity course.]
 - a. *What were you thinking then?*
 - b. *What were you feeling then?*
2. What if anything, did you know about creativity before the course?
3. How would you describe the person you were before the course?
4. Could you tell me your thoughts and feelings after having experienced creativity in the course?
5. Could I ask you to describe the most important lessons you learned through experiencing creativity in the course?
6. How have you experienced your own creativity since you took the course?
 - a. What contributed to this?
7. Were there any changes you added into your life based on the creativity course experience?
 - a. *If yes, tell me what happened.*
 - b. *What were you thinking?*

1 Charmaz, Kathy. *Constructing Grounded Theory*. 2nd edition. Introducing Qualitative Methods. London; Thousand Oaks, Calif: Sage, 2014.

8. Are there any specific aspects from the course that you have held on to or developed further since having taken the course?
9. What thoughts or feelings do you have about creativity in general?
10. What thoughts or feelings do you have about your own creativity?
11. What value does creativity hold in your life?
12. What positive changes have occurred in your personal life since having taken the creativity course?
13. What positive changes have occurred in your professional life / your job since having taken the creativity course?
14. Are there any negative changes that have occurred in your life (or in your job) since having taken the creativity course? If so, could you elaborate.
15. Could you describe a typical day for you when you are creative? (*probe for different times*).
 - a. Now tell me about a typical day when you are personally creative?
 - b. Now tell me about a typical day when you are professionally creative?
16. Reflecting on your experience with creativity at your work, are there any high points or low points?
17. Reflecting on your experience with creativity in your personal life, are there any high points or low points?
18. What do you think are the most important ways to practice, train or improve your own creativity and creative thinking skills?
19. How do you define creativity in your own words?
20. *Could you tell me about how your views and/or actions might have changed since you have completed the creativity course?*

21. *How have you grown as a person since the creativity course?*
 - a. *Tell me about the strengths that you discovered or developed through creativity.*
 - b. *[If appropriate] What do you most value about yourself now? What do others most value in you?*

22. *As you look back on the creativity course, are there any other events that stand out in your mind? Could you describe (each one) it?*

23. *Do you think that creativity can affect the people you interact with?*
 - a. *Personal life or*
 - b. *Professional life?*

24. *Is there anything else you would like to share?*

25. *Is there something else you think I should know to understand creativity better?*

26. *Is there anything you would like to ask me?*

Thank you very much for your participation

APPENDIX 4

SYLLABUS

MK342-01 – Syllabus – Fall 2023

Breakthrough Thinking

Thomas Vogel

MK342-01 Breakthrough Thinking and Marketing Communications

Instructor:

Thomas Vogel
Professor
thomas_vogel@emerson.edu
(617) 824-8285
120 Boylston Street, 9th Floor, W902

Office Hours: Wednesday 2pm to 3pm, and by appointment via Zoom Video

Meeting Times / Location:

Tuesday & Thursday, 4-5:40pm / Walker 401

Course Description:

This course is designed to explore the nature of creativity, creative thinking and creative problem solving. We will investigate how creativity, creative thinking, creative problem solving (CPS), and visual communication influence our world, and especially the business of global marketing communication. We will look at creativity theorists, famous artists, innovators, scientists, and creative marketing practitioners from around the world to see how the influence and principles of creative thinking and CPS can be used as a way of self-expression but also as tools to develop successful business and marketing strategies, innovate, and solve business problems. In addition, you will also learn and practice various tools and techniques to develop more flexible thinking and effective marketing communication messages.

In this course, you will be exposed to Creativity, the Creative Process and Creative Strategies, Idea Development and Creative Concepts, as well as History of Creativity Research and current events. Additionally, the course will familiarize you with the nature of creativity, both as an inherent human activity and as an enlivening capacity to be nurtured and developed. You will be given numerous assignments, some of which will be produced in sketchbooks and drawing pads, and some with software you might be familiar with, such as Adobe Creative Suite, e.g. PhotoShop, InDesign and/or other related programs. There will be several presentations throughout the course, to facilitate the sharing of ideas and hone effective and innovative presentation skills.

Learning Goals and Outcomes:

This course will enable you:

1. To develop a critical understanding of concepts, theories and trends in creative and strategic thinking as well as problem solving.
2. To learn how to develop creative strategies and creative concepts, and write creative briefs.
3. To analyze and evaluate ideas and concepts according to their potential in the realm of marketing communication objectives.
4. To develop creative solutions for the challenges posed by the current marketing communication environment.

In addition, in-class exercises and homework assignments will foster the direct development of your creative sensibilities and abilities. Ultimately, you will seek to integrate critical understanding with experiential knowledge to gain a deep understanding of the material and a more intimate understanding of yourself.

It is not the intent of this course to make you all art directors and/or copywriters. This course is meant for you to become a better strategic, creative and critical thinker, learn some of the basic principles and theories of creativity, creative problem solving, and how to apply them, so that you can create effective communication that is appealing and user friendly, as well as solve problems in marketing and business.

Additionally, the course should help you develop skills in the area of conceptual, creative and critical thinking as well as problem solving, in order to get into the mindset of a designer and/or art director and/or copywriter and improving your ability to collaborate with, and/or better direct the work of the so-called creatives in an agency or in-house environment. In summary, the course will focus on Thinking and Exploration rather than Using Software.

Required Text:

Cameron, Julia (2002); The Artist's Way: A Spiritual Path to Higher Creativity. Penguin Putnam Inc., ISBN 0-87477-694-5

Vogel, Thomas (2014); Breakthrough Thinking: A Guide to Creative Thinking and Idea Generation, ISBN 978-1440333262. Simon and Schuster. Paperback or Kindle Edition.

Required Reading Packet (to access and purchase this coursepack go to this unique link:

<https://hbsp.harvard.edu/import/1092280>

1. Amabile, Teresa (1998); How to Kill Creativity, Harvard Business Review Article, Product Number: 98501
2. Kramer, Steven J., Amabile, Teresa (2011); The Dynamics of Inner Work Life: Understanding What Drives Human Motivation, Creativity, And High Performance, Harvard Business Press Chapters, Product #: 8597BC
3. Brown, Tim (2008); Design Thinking - how to deliver on a great plan, Harvard Business Review, Product #: R0806E
4. Catmull, Ed (2008); How Pixar Fosters Collective Creativity, Harvard Business Review Article, Product #: R0809D
5. Pillay, Srinii (2017); Your Brain Can Only Take So Much Focus, HBR Web Article, Product #: H03NKH
6. Avery, Jill, Greenwald, Rachel (2023), A New Approach to Building Your Personal Brand, Product Number: R2303L-PDF-ENG

Required Reading/Viewing & Listening on Canvas and via Emerson Library Databases:

See complete assignment details on Canvas.

See listings below and on last page for additional recommended texts.

Required for Class:

Sketch Book - minimum size 8 ½ x 11", Drawing Pad - minimum size 14 x 17", Pencils (color and black), Sharpie Marker, Tape, Glue Stick, Scissors.

Required Collaboration Tools for Class:

Canvas: <https://canvas.emerson.edu/>

Mural: <https://www.mural.co/> (Please sign up for a Mural trial account)

Blog: <http://word.emerson.edu/breakthroughthinking/>

Recommended Readings:

Maisel, Eric (2020). **The Creativity Workbook for Coaches and Creatives**, Routledge, ISBN: 978-0-367-37492-1

Griffin, Glenn, Morrison Deborah (2010); **The Creative Process Illustrated**, HOW Books, ISBN 9781600619601

Heath, Chip and Dan (2007/2008). **Made to Stick**: Why Some Ideas Survive and Others Die; Random House

Wind, Yoram (Jerry); Hays, Catharine Findesen (2016-02-05). **Beyond Advertising: Creating Value Through All Customer Touchpoints***; Wiley. Kindle Edition.

Zaltman, Gerald, Zaltman, Lindsay H. (2008). **Marketing Metaphoria**: What Deep Metaphors Reveal About the Minds of Consumers, Harvard Business School Publishing

Additional Websites or Digital Tools Referenced During the Class:

Ad Age: <http://adage.com/>

Art, Copy & Code: <https://www.thinkwithgoogle.com/collections/art-copy-code.html>

Behance: <http://www.behance.com>

Brain Pickings: <http://www.brainpickings.org/>

Creativity: <http://creativity-online.com/>

Thinking with Google: <https://www.thinkwithgoogle.com/>

The Future of Advertising: <http://wfoa.wharton.upenn.edu/>

Project Re: Brief: <http://www.projectrebrief.com/>

99U: <http://99u.com/>

Apps:

Whack Pack: Creative Thinking Tool

Action Method: Project Management Tool

iThoughts: Mind Mapping Tool

Instagram: <https://www.instagram.com> (course hash tag: #BrkThruThink)

Attendance:

While in this class during our in-person [and possibly during some remote learning classes via Zoom Video] you are considered a young professional and classes are considered meetings. Attendance and punctuality are therefore expected as well as required. The interactive nature of the class cannot be reproduced and missing class will cause you (and possibly your team) an unfair disadvantage on your final presentations.

NOTE: This becomes even more important and will be actively monitored in relation to the final (team) projects, where full participation by all (team) members is crucial for your collective success.

Please contact me at your earliest convenience in case you need any special accommodation.

... More about Attendance (OFFICIAL)

The faculty of the Department of Marketing Communications has agreed to adhere to the following attendance policies in line with those described in the Emerson College Catalogue and the Faculty Handbook (8/01; 301.04):

It is expected that students will attend classes regularly and promptly and be responsible for all coursework if they are absent. For undergraduate and graduate classes meeting once a week, one (1) unexcused absence would result in a failing (F) grade. If a class meets twice a week, three (3) unexcused absences would result in a failing grade; and for classes meeting three times a week, five (5) unexcused absences would result in a failing grade.

Certainly, extenuating circumstances arise. **An excused absence means that you notify me immediately and if necessary take responsibility to develop a mutual led upon plan, to stay connected and current with all coursework.** NOTE: *Process issues will not be considered as acceptable reasons for an excused absence. (Ex: "my alarm didn't go off")*

General Expectations:

Creativity loves engaged listeners and participants. Research shows that note taking by hand enhances long-term comprehension and sharpens your creative thinking skills (see select articles provided on canvas). Therefore, technology will be kept to a minimum.

It is expected that students will adhere to the following classroom norms:

1. Cell phones are to be turned off before class begins.
2. During in-person classes computer use is limited to research and special in-class exercises and assignments, as well as during remote learning sessions.
3. Texting, engagement with social media and audio recording are prohibited during class.

During remote learning sessions we will use technology particularly as communication and collaboration tools to support the experiential nature of this class.

Course Expectations:

Participation: As far as I am concerned, you are young professionals. Since marketing at its core is a social and collaborative endeavor, you are not only expected to show up for class on time and participate in class discussions, but also work as problem solvers and storytellers performing at a high level with minimal prompting. **Quantity and quality of participation in discussions and in-class activities will be noted and factored into your final grade.**

Unexcused absence from a class, an exam or presentation will result in a zero being entered for that requirement. An excused absence must be arranged with the instructor before the class or the presentation.

In addition, you are expected to *actively* contribute to your team's effort in a respectful manner with each other in relation to the Final Project. ***Should this not be the case, I need to be alerted asap to help facilitate a solution, as the final project will be evaluated on a group, not individual basis without exception.***

Peer Evaluation: members of team projects will evaluate their fellow team members regarding contribution to the project, e.g. Final Project, Midterm Research Project.

Completion of all assignments by the deadline.

There will be penalties for late submissions, as follows:

- One half letter grade deduction per day late, up until four days after the deadline.
- Unless otherwise arranged with the instructor, no assignments that are more than 5 days late will be accepted.

Please let me know as soon as possible if there are any circumstances that prevent you from completing the work on time. If such circumstances arise, I will be happy to work with you to create an alternative submission schedule. You do not need to disclose the nature of the circumstances to be granted an extension, but you do need to ask for an extension ahead of the deadline to avoid the penalties.

Note: If you submit work as a GoogleDoc, please make sure that the permissions are properly set so that I can view the document. The lateness penalty applies to all documents that cannot be viewed, even if the link to the document is submitted on time.

Class preparation, participation, and professionalism is worth 20 percent of your final grade.

Your grade for class participation and professionalism must be earned. While class attendance is expected and important, it is not sufficient to earn the participation and professionalism grade. In addition to arriving in class on time, being prepared, and submitting assignments on time, I will also consider the following in assigning an overall class participation and professionalism grade:

1. Is the student a good listener?
2. Is the student willing to participate?
3. Are the student's points relevant to the class discussion? Are they linked to the comments of others?
4. Does the student interact with other class members in a professional, collegial manner?
5. Does the student treat the professor with respect in class, email exchanges, and meetings?
6. Do the student's comments add to the group's understanding of the situation?
7. Do the student's comments show evidence of analysis of the readings?
8. Does the student distinguish among different kinds of data (i.e., facts, opinions, beliefs, etc.)?
9. Is the student willing to test new ideas, or are all comments "safe" (e.g., contributing facts without analysis or conclusions)?
10. Do the student's comments clarify and highlight the important aspects of earlier comments and lead to a clearer statement of the concepts covered?
11. Does the student ask good questions? Does the student negatively contribute to the class by talking when the instructor or other students who have been called on are talking?
12. Does the student negatively contribute to the classroom environment by text messaging, emailing, or looking and web sites during class?*
12. Does the student shout out answers while others are raising their hands to be recognized?
13. Do the student's assignments show evidence of conceptual integration and genuine effort? Do they follow stated guidelines?
14. Overall, does the student arrive on time, listen, productively participate, and add value to the class?*

Grading:

Final grades will be determined in regard to the following point distribution:

- Attendance and Participation (aka Class Contributions):	20 %
- Blog Posts:	10 %
- Reading, Viewing & Listening Assignments:	10 %
- Challenge Assignments	15 %
- Research Project: (see page 10_ for details)	20 %
- Final Project	25 %

Total: 100 %

Department of Marketing Communication Grading Expectations.

Assessment scale: A= 93-100%, A- = 90-92%, B+ = 87-89%, B = 83-86%, B- = 80-82%, C+ = 77-79%, C = 73-76%, C- = 70-72%, D = 69-60%, F = 59% and below.

- o A "C" is earned when a student demonstrates that he/she has learned concepts & terms and is able to express those concepts & terms in basic terms.
- o A "B" is earned when a student demonstrates that he/she has learned concepts & terms and applies those concepts practically. Additionally, a student must apply the concepts to solve problems, think critically and express those concepts coherently.
- o An "A" is earned when a student demonstrates that he/she has learned concepts & terms, and integrates those concepts with larger understandings, and applies the concepts to new sets of problems. The student

must demonstrate concepts with creativity and ingenuity (*illustrated by divergence, relevance & effectiveness*), and make recommendations, as well as express those recommendations with agility.

NOTE: The above grading rubric, represents the department standards on the subject, which are observed in this class. Focusing too much on grades can be detrimental to creativity and to achieving your full creative potential. It is the goal of this course that your participation, contributions, assignments, sharing and presentations throughout the class will progressively demonstrate your comprehension, application, risk-taking and the inspiration/integration garnered from the class experiences, lectures, and reading materials.

Grade rubric for the course in relationship to the creative challenge assignments and milestone projects:

Outstanding work. Unexpected, well crafted, on time.	A
Very good work. Not exactly the most creative idea. Well-crafted, on time.	B+
Good work. Seldom unique but well-crafted and on time.	B
Expected executions. Craftsmanship problems, other flaws.	C+
Expected executions. Lapses in craftsmanship, major flaws.	C
Major flaws with some redeeming characteristic. On time.	D+
Little effort. Messy. On time.	D
No effort. Didn't follow assignment or instructions.	F

Academic Integrity and Plagiarism:

It is the responsibility of all Emerson students to know and adhere to the College's policy on plagiarism. If you have any question concerning the Emerson plagiarism policy or about documentation of sources in work you produce in this course, speak to your instructor.

The Emerson College Policy on Plagiarism is thoroughly explained in the Graduate Handbook, and is also available on the Emerson web site at the following URL: http://www2.emerson.edu/academic_affairs/policies/Plagiarism-Policy.cfm. If unauthorized assistance is used to prepare assignments, or if there is evidence of plagiarism, students will be referred to the academic integrity committee for resolution. Please do not cut and paste from online sites or from work done by others!

If you have any question concerning the Emerson plagiarism policy or about documentation of sources of work you produce, speak to your instructor.

Artificial Intelligence in the Classroom

You are permitted to use ChatGPT, Bard, Dall-E2, Midjourney and other artificial intelligence (AI) tools to assist you in gathering information and brainstorming ideas but you may not copy and paste information directly from the AI tool and present it as your own without citation (consider revising this statement if there are specific steps in which AI use is allowed or not allowed and/or insert expectations for revision from AI-generated language to the final draft). You are responsible for the information you submit based on an AI query and for assuring that it does not contain misinformation or unethical content and that it does not violate intellectual property laws. You are expected to include a disclosure statement at the end of your assignment describing which AI tool you used and how you used it. For example, "ChatGPT was used to draft about 50 percent of this paper and to provide revision assistance. AI-produced content was edited for accuracy and style. Your use of AI tools must be properly documented and cited for academic integrity. For this course, we will use [American Psychological Association (APA) formatting].¹

Example: When prompted with "Is the left brain right brain divide real or a metaphor?" the ChatGPT-generated text indicated that although the two brain hemispheres are somewhat specialized, "the notion that people can be characterized as 'left-brained' or 'right-brained' is considered to be an oversimplification and a popular myth" (OpenAI, 2023). Reference: OpenAI. (2023). ChatGPT (Mar 14 version) [Large language model]. <https://chat.openai.com/chat>

Additionally, it is the responsibility of all Emerson students to know and adhere to the College's policy on the use of Artificial Intelligence in the Classroom <https://emerson.edu/faculty/governance-and-guidelines/artificial-intelligence-classroom>.

¹ <https://www.depts.ttu.edu/atpdc/AISyllabusStatementsClassroomGuidelines.pdf>

Accessibility Statement:

I am committed to creating a learning environment in which everyone can fully participate and thrive. I recognize that there are many reasons students may need to adjust their pace, style, or method of learning, and am committed to supporting you in any way that I can. If you have any access needs that I can better support by changing any aspect of my teaching or of the course, you are welcome and encouraged to let me know in public or in private how I can better support your access needs.²

Emerson's official policy is: Emerson is committed to providing equal access and support to all students who qualify through the provision of reasonable accommodations so that each student may fully participate in the Emerson experience. If you have a disability that may require accommodations, please contact Student Accessibility Services at SAS@emerson.edu or 617-824-8592 to make an appointment with an SAS staff member. Students are encouraged to contact SAS early in the semester. Please be aware that accommodations are not applied retroactively.

*"You need not have a specific reason or diagnosis to talk to me about your access needs; everyone deserves to learn in the way that makes the most sense for them at any point in time."*³

Diversity and Inclusion:

I am committed to creating an inclusive learning environment in which diverse perspectives and experiences are recognized, respected, and supported. Every student in this class will be honored and respected as an individual with distinct experiences, talents, and backgrounds. Students will be treated fairly regardless of race, religion, sexual orientation, gender identification, disability, socio-economic status, or national identity. Issues of diversity may be a part of class discussion, assigned material, and projects. The instructor will make every effort to ensure that an inclusive environment exists for all students. If you have any concerns or suggestions for improving the classroom climate, please do not hesitate to speak with the course instructor or to contact the Social Justice Center at 617-824-8528 or by email at sjc@emerson.edu.

Title IX Statement:

The instructor of this class is a responsible employee at Emerson College which means that they are not a confidential resource. They will keep your information as private as they can, however, if you disclose information that may violate Emerson's Sexual Misconduct Policy they must report it to the Title IX Coordinator. You may also contact the Title IX office directly at titleix@emerson.edu or 617-824-8999. Alternatively, if you would like to speak with someone confidentially, please contact the Healing & Advocacy Collective, Counseling and Psychological Services, or Health and Wellness.

Caring for Your Well Being:

Many stressors or concerns may impact learning and academic success over the course of the semester, including (but not limited to): illness, anxiety, depression, loss of motivation, high levels of stress, strained relationships, lack of sleep. Please center taking care of yourself, seek help when needed, and let me know how I can best support you. If the source of the stressors is academic, please get in touch with me so that we can find solutions together. For other kinds of concerns, Emerson offers many resources, including: Counseling and Psychological Services (ECAPS; 617-824-8595); the Center for Health and Wellness (617-824-8666); the Healing & Advocacy Collective (617-824-8857); the Center for Spiritual Life (617-824-8036). National hotlines are listed on the ECAPS website (scroll to the bottom of the page).

Land Acknowledgment:

I acknowledge the sacred land on which we work, teach, and learn. This is the ancestral and unceded homeland of the Massachusetts people, whose name was appropriated by this Commonwealth. I acknowledge the violence, forced removal, and violations of sovereignty that have been done and continue to be perpetrated against Indigenous people. I also recognize that this acknowledgment is insufficient.

Values:

Two core values, inquiry and civility, govern our class. Inquiry demands that we all cultivate an open forum for exchange and substantiation of ideas. Strive to be creative, to take risks, and to challenge our conventional wisdom when you see the opportunity. Civility supports our inquiry by demanding ultimate

² Drawn from Lydia X.Z. Brown, "Laboring for Disability Justice and Liberation," "Syllabus Language," <https://autistichoya.net/resources/syllabus-language/>.

³ Ibid.

respect for the voice, rights, and safety of others. Threatening or disruptive conduct may result in course and/or university dismissal. Civility also presumes basic courtesy; please be well rested, on time, and prepared for class, which includes time for a restroom stop before (not during) class and silencing all personal devices.

My perspective is that we never cease being students of this world, so I believe that attentive, reflective people always have something to learn from others. Good discussions can be energetic and passionate but are neither abusive nor offensive. Vibrant, vigorous inquiry derives from discussions that:

- challenge, defend, and apply different ideas, theories, perspectives, and skills,
- extend a body of knowledge into different arenas and applications, and
- result in a synergy that compels us to seek resolution to these discussions.

Privacy Policy

Regardless of modality or whether this course is being recorded by the College with the permission of the students for classroom purposes, this class is considered a private environment and it is a setting in which copyrighted materials, creative works and educational records may be displayed. Audio or video recording, filming, photographing, viewing, transmitting, publishing, producing or publishing the image or voice of another person or that person's materials, creative works or educational records without the person's knowledge and expressed consent are strictly prohibited.

Additional Resources:

See resources section on Canvas. Additionally, you can contact the Emerson College's Computer Help Desk.

Course Outline: (All Readings and Assignments are due before class).

NOTE: It is up to every student to be prepared for the next class. You should always draw, write, sketch, design your potential ideas/solutions/text/designs in your sketchbook.

Class #	Date	Description:	Readings, Case and/or Assignments to prepare before class:
1	Sep. 5	<p>Course Introduction:</p> <ul style="list-style-type: none"> - Class Member Introductions - Course Objectives - Syllabus/Calendar Review - Grading - Project Overview (Milestone List) - Something Smart / Something Cool (Optional: Semester Blog) <p><i>In-Class Activity: Portraits, Adjectives, Sandwiches</i></p>	<p>Please review Canvas for additional reading and viewing assignments.</p>
2	Sep. 7	<p>Introduction to Creativity [and the Marketing Communication Environment Part-1].</p> <p>[Why] is there a need for creativity.</p> <ul style="list-style-type: none"> - The Creative Environment - What is creativity? - Who is creative? - Syllabus/Calendar Review - Finalize Class Roster, - Pleased to Meet You <p>> Interview a classmate.</p>	<p>Morning Pages, daily, throughout the whole semester!</p> <p>Readings: <i>The Artist's Way: A Spiritual Path to Higher Creativity, Chapter 1</i> <i>Breakthrough Thinking: Intro, Chapter 1, New Truths about Creativity; Chapter 2, What is Creativity?</i></p> <p>[Write Blog, weekly, throughout the whole semester!]</p>
3	Sep. 12	<p>Introduction to Creativity [and the Marketing Communication Environment Part-2].</p> <ul style="list-style-type: none"> - Lecture: [Why] is there a need for creativity. cont'd <p><i>Discussion: Something Smart / Something Cool</i></p>	<p>Cameron, Artist's Date (weekly) Creativity Blog Writings</p>

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Breakthrough Thinking

Thomas Vogel

			<p>Readings: <i>The Artist's Way: A Spiritual Path to Higher Creativity</i> <i>Breakthrough Thinking: Chapter 3, Creative Thinking</i></p>
4	Sept. 14	<p>The Creative Process <i>(Introduction to Creativity & Creative Process)</i></p> <p><i>Discussion: Something Smart / Something Cool</i> <i>Artist Date</i></p>	<p>Readings: <i>The Artist's Way: A Spiritual Path to Higher Creativity, Chapter 2</i> <i>Breakthrough Thinking: Chapter 4, The Creative (Problem-Solving) Process.</i></p>
5	Sep. 19	<p>The Creative Process <i>(Introduction to Creativity & Creative Process, Divergent/Convergent Thinking)</i></p> <p><i>In-Class Exercise: Visualization of Concepts or Stories</i> <i>Discussion: Something Smart / Something Cool</i></p>	<p>Cameron, Artist's Date (weekly) Interview a classmate.</p> <p>Readings: <i>The Artist's Way: A Spiritual Path to Higher Creativity</i></p>
6	Sep. 21	<p>The Creative Person <i>(Inner Creativity / Mindfulness / Mindlessness)</i></p> <p><i>Discussion: Something Smart / Something Cool</i> <i>Research Project Assignment Details</i></p>	<p>Readings: <i>The Artist's Way: A Spiritual Path to Higher Creativity</i></p>
7	Sep. 26	<p>The Creative Person <i>(Inner Creativity / Mindfulness / Mindlessness)</i></p> <p><i>In-Class Exercise: Creative Writing</i></p> <p><i>Discussion: Something Smart / Something Cool</i></p>	<p>Cameron, Artist's Date (weekly)</p> <p>Readings: <i>The Artist's Way: A Spiritual Path to Higher Creativity</i> <input type="checkbox"/> Pillay, Srini (2017); <i>Your Brain Can Only Take So Much Focus</i> <input type="checkbox"/> Langer, Ellen — <i>Science of Mindfulness and Mindfulness</i></p>
8	Sep. 28	<p>The Creative Person - <i>The Idea Economy</i> - <i>Telling the Story</i> - <i>Made to Stick</i></p> <p><i>In-Class Exercise: Evaluation / Personal Twist Story</i></p> <p><i>Discussion: Something Smart / Something Cool</i></p>	<p>Readings: <i>The Artist's Way: A Spiritual Path to Higher Creativity</i> <i>Breakthrough Thinking: Chapter 6, Evaluation of Ideas</i></p>
9	Oct. 3	<p>The Creative Person</p> <p>> <i>Presentations from Students</i> <i>Discussion: Something Smart / Something Cool</i></p>	<p>Challenge #1: Visual Self Presentation Cameron, Artist's Date (weekly)</p> <p>Readings: <i>The Artist's Way: A Spiritual Path to Higher Creativity</i></p>
10	Oct. 5	<p>The Creative Person</p> <p>> <i>Presentations from Students</i></p>	<p>Challenge #1: Visual Self Presentation Cameron, Artist's Date (weekly)</p>

		<i>Discussion: Something Smart / Something Cool</i>	Readings: <i>The Artist's Way: A Spiritual Path to Higher Creativity</i>
	Oct. 10	(Tuesday) Monday class schedule observed	Cameron, Artist's Date (weekly)
11	Oct. 12	The Creative Process <i>(Creative Problem Solving Tools & Techniques)</i> <i>Discussion: Something Smart / Something Cool</i> <i>Discussion: Design Thinking</i> <i>TBD: Introduction of Final Project</i> <i>Enemy & Champion</i>	Cameron, Enemies & Champions Readings: <input type="checkbox"/> Brown, Tim (2008); <i>Design Thinking</i> <i>Breakthrough Thinking: Chapter 5, Creative Thinking Methods and Techniques.</i>
12	Oct. 17	The Creative Process <i>Discussion: Something Smart / Something Cool</i> Data Visualization & Communicating Ideas Effectively	Readings: <i>Breakthrough Thinking: Chapter 6, Evaluation of Ideas; Chapter 7, The Importance of Communicating Ideas Effectively.</i>
13	Oct. 19	The Creative Person > <i>Presentations from Students</i> <i>The "Love to" List</i>	Cameron, The "Love to" List Cameron, Artist's Date (weekly) Challenge #2: Topographical Map Visualization Readings: <i>The Artist's Way: A Spiritual Path to Higher Creativity</i>
14	Oct. 24	The Creative Person > <i>Presentations from Students</i>	Cameron, Artist's Date (weekly) Challenge #2: Topographical Map Visualization Readings: <i>The Artist's Way: A Spiritual Path to Higher Creativity</i>
15	Oct. 26	The Creative Person > <i>Presentations from Students</i> <i>De-Brief Challenge #2</i> <i>Introduction of Final Project</i>	Challenge #2: Topographical Map Visualization Readings: <i>The Artist's Way: A Spiritual Path to Higher Creativity</i>
16	Oct. 31	The Creative Place <i>The History of Pixar</i> <i>Pixar 4P Mind Mapping Exercise</i> <i>Discussion: Something Smart / Something Cool</i>	Cameron, The Life Pie Cameron, Artist's Date (weekly) Readings: <input type="checkbox"/> Kramer, Steven J., Amabile, Teresa (2011); <i>The Dynamics of Inner Work Life: Understanding What Drives Human Motivation, Creativity, And High Performance</i>

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Breakthrough Thinking

Thomas Vogel

			<i>The Artist's Way: A Spiritual Path to Higher Creativity</i> <i>Breakthrough Thinking: Chapter 8, Creativity and Place.</i>
17	Nov. 2	The Creative Place <i>The History of Pixar</i> <i>Pixar 4P Mind Mapping Exercise</i> <i>- Coffee House Observation 2</i> <i>Discussion: Something Smart / Something Cool</i>	Readings: <input type="checkbox"/> Calmull, Ed (2008); How Pixar Fosters Collective Creativity, <input type="checkbox"/> Amabile, Teresa (1998); How to Kill Creativity <i>The Artist's Way: A Spiritual Path to Higher Creativity.</i> <i>Breakthrough Thinking: Chapter 9, Creativity and Philosophy.</i>
18	Nov. 7	The Creative Process <i>(Creative Problem Solving Tools & Techniques)</i> <i>Note:</i> <i>- Coming prepared to 'workshop' your research</i>	Cameron, In My Room Cameron, Artist's Date (weekly) Readings: <i>The Artist's Way: A Spiritual Path to Higher Creativity.</i>
19	Nov. 9	RESEARCH PROJECTS DUE > Presentations from Students	Readings: <i>The Artist's Way: A Spiritual Path to Higher Creativity.</i>
20	Nov. 14	RESEARCH PROJECTS DUE > Presentations from Students	Readings: <i>The Artist's Way: A Spiritual Path to Higher Creativity.</i>
21	Nov. 16	The Creative Process Deconstruct/Debrief Research Projects Alt.: Research Projects (Presentations from Students) <i>To Discuss:</i> <i>- Writing a Creative Brief Exercise</i> <i>- Coffee House Observation 3</i> <i>- Challenge #3</i>	Cameron, Artist's Date (weekly) Readings: <input type="checkbox"/> Csikszentmihalyi, Mihaly; Creativity - Ch14-Enhancing Personal Creativity <i>Breakthrough Thinking: Chapter 10, Maintaining a Flexible Mind.</i>
22	Nov. 21	Workshop: Portfolio/Final Projects > Individual meetings with final project teams > Review of creative brief and key concepts	Readings: <i>The Artist's Way: A Spiritual Path to Higher Creativity.</i> <input type="checkbox"/> Avery, Jill, Greenwald, Rachel (2023), A New Approach to Building Your Personal Brand
	Nov. 23	Thanksgiving Break (no classes)	

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Breakthrough Thinking

Thomas Vogel

23	Nov. 28	The Creative Person <i>Solution to Challenge #3: Reworked Visual Self, Topo Map, other idea from class, or research project</i>	<i>Solution to Challenge #3: Reworked Visual Self, Topo Map, Research Project, new product / new service</i> <i>Cameron, Artist's Date (weekly)</i>
24	Nov. 30	The Creative Person <i>Solution to Challenge #3: Reworked Visual Self, Topo Map, other idea from class, or research project</i>	<i>Solution to Challenge #3: Reworked Visual Self, Topo Map, Research Project, new product / new service</i> Readings: <i>The Artist's Way: A Spiritual Path to Higher Creativity.</i>
25	Dec. 5	Workshop: Portfolio/Final Projects > <i>Individual meetings with final project teams</i> > <i>Review of creative brief and key concepts</i>	Creative Briefs / Key Concepts <i>Cameron, Artist's Date (weekly)</i>
26	Dec. 7	FINAL PROJECTS DUE Presentations	
27	Dec. 12	FINAL PROJECTS DUE Presentations	<i>Cameron, Artist's Date (weekly)</i>
28	Dec. 14	FINAL Class (Cont'd FINAL PROJECT Presentations)	

Note: This schedule might change depending on the circumstances of the course and its interactive and experiential nature. I will communicate with you via e-mail and via Canvas regarding any changes.

Project Overview

Class and Homework Assignments, Presentations, and Postmortems/Personal Assessments:

You will have daily and weekly homework assignments, to which you will be applying the creative thinking principles, and observing and advancing your own thinking process. In order to share ideas and see our progress, you will be presenting to the class your projects on a regular basis. **You should always be prepared to present, discuss and answer the following questions:** What do you observe about your own process? What feels like it is working or not working? What changes can you make? What does doing the work or exercise show you about Creativity? Regarding Projects: What is the creative objective and solution? What are/were the alternatives? What is the best recommendation and why? What makes your creative idea/concept exceptional, different, and unique?

Always think about your goal and key objective, and result you expect your concept/idea/solution will create among the audience. You must be able to describe your concept/idea/solution in one word, one sentence and one paragraph (see also information about storyboard below).

There will be a **maximum time of 6 minutes** allowed for presenting your individual homework assignments in class. Please test-drive and time your presentations accordingly at home before presenting in class. I will time your presentations.

Note: Due to time constraints not everyone might get a chance to present his/her work in class. Therefore, **everyone is required to submit electronic storyboards describing & summarizing the key concept / idea and words & images used.** An electronic version of the storyboard is available in .pdf and .doc formats on the Canvas course folder. Additionally, you are encouraged to upload all your work, at least key visuals, on your weekly/daily blog.

Reading Assignments:

Reading assignments are supplementing the above mentioned assignments and are given to foster the direct development of your analytical, critical and strategic thinking skills, and to ask and formulate the [right] questions. Upon reading any articles, case studies and other assigned readings you must always be prepared to present, discuss and answer the answer the following questions (also, check assignments on Canvas regarding submission instructions):

- What are the three take-aways from any reading assignments?
- What are the three most important questions the reading inspires/challenges you to ask?

Research Project, *Understanding Creative Individuals and Agencies through the Framework of the 5Ps of Creativity:*

You will be assigned an agency, artist, art director, industry innovator or designer to research and analyze through the 5P Creativity Framework. Your goal is to create a presentation and subject-inspired piece for the class about your subject that is educational, dynamic and memorable.

Note: *We will decide at the beginning of the semester if this will be an individual assignment or a group project with teams of two.*

The focus of this project is duo fold:

- to gain a hands-on understanding of applying the 5P Creativity Framework and how it can be used to evaluate creativity across all creative disciplines and industries
- to gain and present an in depth look at the methods and ideas that are revolutionizing (or have revolutionized) the advertising, marketing and creative industries and the Creatives that influence our culture

There are Three (3) deliverables for this project (2 team-based, 1 individual by each team member):

- Presentation (max 10 minutes) (team-based deliverable)
- Works Cited and Personal Experiences Document (individual deliverable - see list of required sources below*)
- Inspired/Influenced Creative Deliverable (team-based deliverable)

You must submit the three deliverables "presentation", "works cited and personal impressions document" and "inspired/influenced creative deliverable" electronically to the MK342 course folder on canvas.emerson.edu, **with proper document labeling according to the following format:**

Presentation: NameofOrganization_yourLastName_your LastName_present_yyyyymmdd

Impression Document: NameofOrganization_yourLastName_your FirstName_impression_yyyyymmdd

Creative: NameofOrganization_yourLastName_your LastName_creative_yyyyymmdd.

Presentation:

You will need to create a **maximum 18 minute** long presentation that captures the spirit of your subject and their key contribution(s) to their field/industry. Your presentation should clearly cover the 5P Framework: Person/People (personal history, personality traits); Place (physical work space and cultural environment); Process (creative methods); Product (final product/creative output) and Philosophy (strategic approach). Note: This can (and should) be done in a creative way. Also include in your presentation how your subject got started in the art/advertising/creative world, some of the person/s/agency's more famous works, who and where the person/agency has worked, what styles they use, who some of this artist/s/agency's biggest influences are, how this artist/agency uses some of the creative thinking and design principles, etc. **Most importantly: take into consideration that many in the audience are not familiar with your creative or agency. You will need to educate, engage and entertain the audience. Carefully**

consider the best ways approach this when curating the material for your presentation. At the end of your presentation you will share your creative deliverable.

You are encouraged to:

- Think carefully about PPT presentation software and also consider options beyond it (see restrictions below)
- Leverage and/or create dynamic content grounded in your research that educates and inspires the class about your creative or agency and their work
- Apply the “slicky” communications tactics that you have learned in this course thus far
- Take calculated risks
- “Channel” your creative or agency
- Be imaginative and creative

There are some **restrictions** for the presentation of this project:

- You may **not** use Prezi
- If you use Power Point, presentation software, or layout boards, you may not use more than 10 slides/boards total
- Use of bullet points is limited to three or less slides
- You must physically interact/narrate/speak during your in-class presentation in order to capture and educate on the “spirit” of your agency or creative (i.e. no slide shows, movies with pre-recorded voice over, etc.)

***Works Cited and Personal Impressions Document:**

In addition to the presentation, you will need to hand in a typed document listing all of your reference sources (with correct MLA formatting) and include a brief paragraph for at least six (6) of the required (diverse) sources describing the key takeaways and that you garnered from reading, watching, or experiencing for each particular reference source. This should be written from a personal and experiential perspective. The document should be typed, and **your references need to include at least the following: two print articles; one book; one movie; rich media including: online videos, websites, visuals, blogs, and social media.** If it is possible for you to attend a museum exhibit, access the archive of, visit the location/studio of, and/or interview your creative or a representative this too should be included in your research and incorporated into your presentation. (Essentially, your references should demonstrate that you explored in-depth all of your topic’s creative facets, influences and output.)

Inspired/Influenced Creative Deliverable

At the end of your presentation (or incorporated into the presentation) to the class you will share a creative piece, created by you in the style of, inspired by, or influenced by your creative or agency. This could be: a spec advertisement, created by you, in the style of agency or creative (i.e., a Jackson Pollock inspired print ad for Absolut Vodka); a creative piece, product or packaging inspired by the process of the creative or agency; or a poster advertising your agency or creative speaking at Emerson. The goal of this activity is to place yourself in the “shoes” of the creative or agency and explore another’s perspective of the creative process.

Your Research Project will be evaluated based on the following:

- Comprehensiveness and clarity of information presented
- Complete and correct coverage of the Creativity 5P framework as it applies to your creative or agency
- Use of diverse references and rich media to create a dynamic portrait of your subject and their contributions to the industry
- Use of creativity and imagination to create an educational and compelling presentation

- Adherence with project restrictions
- A portion of your final grade for the project will be based on your Works Cited and Personal Experiences Document and Creative Deliverable for the project

Final Project, (*Special Instructions will be provided during semester*):

Research, garner insights, and develop the Big Idea, creative concepts, innovative marketing solutions, and designs for the development of a new product or service, and/or a campaign for one of the client projects assigned during the semester. Develop a creative strategy, write a creative brief, and design a campaign, service and/or product (with visuals for each) consisting of relevant components for your client that include:

- Traditional advertising tactics (print, TV, radio, outdoor, etc.)
- Digital (website, virtual, mobile)
- Marketing Communication Tactics (content, native ads, in-game, events, guerilla, sales promotion, exhibit, tv, social media, web 3.0, etc.)
- Non-Traditional (look for opportunities for your client to connect)
- Experiential and/or New Product/Service

Additional instructions and information will be discussed during the course and provided on Canvas.

Visuals representing the campaign ideas should be created for each of the different tactics. No less than 4 to 6 visuals showing the campaign ads, events, or ideas should be part of the final presentation.

Students are also encouraged to think of the "packaging" of the final deliverable.

Presentation time: 10 minutes per person (Note: Additional information will be provided during semester).

Important Note: All final projects must be submitted in electronic format and uploaded to the course folder on Canvas to instructor prior to final presentation.

Brief Overview of Activities

Program/Medium

1. Interview a classmate: Sketchbook / Process Journal (for personal use only, will not be collected, but shared)
2. Morning Pages: Notebook (for personal use only, will not be collected)
3. Artist Dates: Sketchbook / Process Journal (for personal use only, will not be collected, but shared)
4. Coffee House Observations: Sketchbook (for personal use only, will not be collected, but shared)
5. Coffee House Observations: Sketchbook/Drawing Pad (for personal use only, will not be collected, but shared)
6. In Class Exercises: Sketchbook and Drawing Pad (for personal use only, will not be collected, but shared)
7. Visual Self Presentation Concept & Preso: Sketchbook/Drawing Pad & medium of choice
8. Topographical Map Visualization Concept & Preso: Sketchbook/Drawing Pad & medium of choice
9. Various Cameron and Ad Creative exercises: Sketchbook/Drawing Pad (for personal use only, will not be collected, but shared)
10. Research Project professionally prepared, final hand-in +digital version of "personal impression document/paper" and "creative" piece
11. Final Project professionally prepared final hand in +digital version
12. (Optional) Portfolio: digital or portfolio case

Above List Subject to Change

Semester Blog - Documentation of your work (further explanation in class):

You are invited to document / illustrate your work, e.g. analysis, evaluation and critique, and curation of messages, media and channels, and your progress throughout the semester on a blog. On a weekly or daily basis, you are encouraged to cover different topics according to the different materials covered in class and add your own thoughts,

experiences and writings about creativity, innovation and strategic thinking within the context of [international] marketing communication in your blog and develop a “published work of progress”.

Write about things you find in and outside the global marketing communication world, as well as in and outside the world of pop culture, design, art, and marketing communication. Add some samples from disciplines you are familiar with or especially interested in. Additionally, research and add samples from those industries you might consider for your career development. Add some international samples from countries and cultures you are familiar with. Additionally, research and add samples from those cultures and countries you are just learning about.

Suggestion: *During Week 1 you could focus on [creative] messages and pick your own story, add your personal experience in connection to messages in the advertising/marketing world. Then, you could feature [creative] media and channels during the following weeks and reflect on your process / creative journey.*

You are welcome to use any available blogging software, e.g. blogger.com, **wordpress.com**, posterous.com, movabletype.com (for which tech support is available via Emerson College Instructional Technology Group (ITG), see also <http://www.emerson.edu/ig/>).

Additionally, you are required to actively contribute as a “creativity online magazine” editor/writer to our MK342 Breakthrough Thinking blog at <http://word.emerson.edu/breakthroughthinking/>. Additional information will be provided in class.

(Optional) Portfolio:

While this is not a traditional advertising or portfolio related class, many students take advantage of the ideas and concepts that they have created during the semester to compile a creative thinking portfolio showcasing their work in the class. You are encouraged to evolve your ideas from rough concepts to polished, industry viable pieces. If you'd like to submit a portfolio for review and feedback that summarizes your work in the class, you are welcome to. In some instances, a student may submit a portfolio to be considered as additional credit towards their final grade in the class.

For the portfolio choose any 6* ideas, campaigns, advertisements, creative briefs, designs, stories, business plans, artwork developed from class and/or home assignments. These can be either computer generated or sketchbook projects. Place each design in your portfolio with a one-paragraph document for each design. Make sure to include your final project in the portfolio as well.

This paragraph should include the following:

- How you designed the piece (ideas that inspired you, programs, medium, etc.)
- Who your target market or audience is for the piece.
- Why you designed the piece the way you did.

**The 6 designs do not include the final project.*



Figure 4-6a. Emergence of six main themes with corresponding codes through axial and theoretical coding



Figure 4-6b. Emergence of six main themes with corresponding codes through axial and theoretical coding

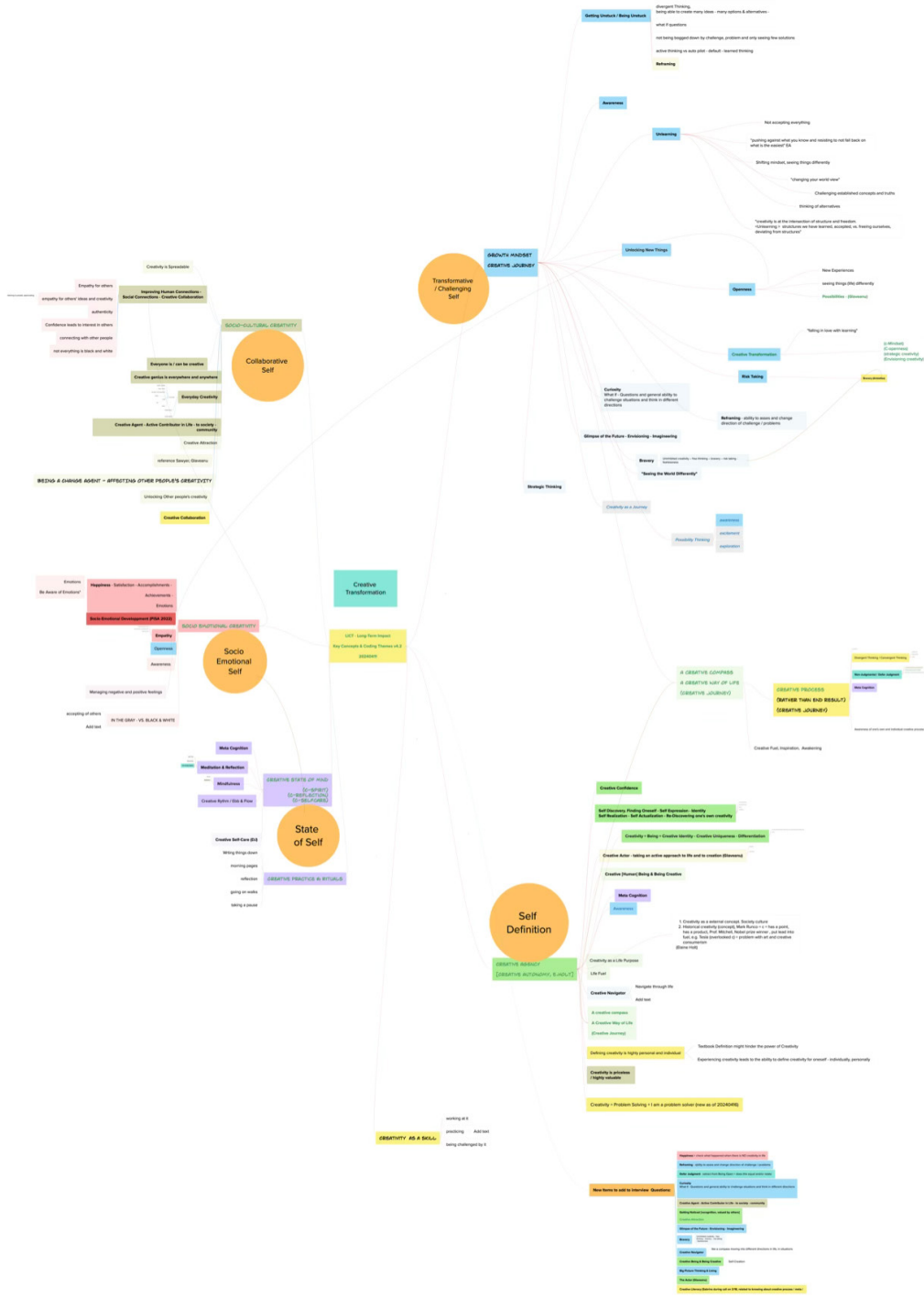


Figure 4-3. Mid stage of initial coding and development of categories and subcategories

Developing Creative Literacy

Existing research confirms that **creative thinking skills** can be improved through intentional training. However, while many studies explore the short-term effects, no prior qualitative research has investigated the **potential long-term influence** of learning and practicing these skills. *Developing Creative Literacy: The Long-Term Impact of Creativity Training* addresses this gap by providing new insights into how a 14-week-long creativity course shapes the lives of those who complete it. The research demonstrates that for the study participants, the creativity training resulted in a **substantive and lasting impact** that extends well beyond their college years.

A New Theoretical Framework

The study identifies six themes that form a new theoretical framework called **C-SPECD**, which provides an updated definition of **Creative Literacy**. These factors represent core skills essential for navigating a rich creative life journey:

- **Creative Competencies:** A strong belief in one's own creative abilities.
- **Collaboration & Empathy:** The capacity to work effectively with others and express empathy for oneself and others.
- **Openness & Growth Mindset:** A willingness to embrace new things and apply a growth mindset for continuous learning and exploring new possibilities.
- **The Creative Process:** The ability to understand the mechanics of the creative process and separate the creative process from the final product.

Creative literacy, as defined by this research, also entails **metacognitive abilities** and the capacity to apply these core skills. The findings offer significant **practical implications for educators, business professionals, and individuals** interested in cultivating these high-demand creative capabilities.

