



Commentary Positive Creativity in a Negative World

James C. Kaufman ^{1,*} and Vlad Glăveanu ^{2,3}

- ¹ Department of Educational Psychology, Neag School of Education, University of Connecticut, Storrs, CT 06269, USA
- ² Department of Psychology and Counselling, Webster University Geneva, 1293 Bellevue, Switzerland; glaveanu@webster.ch
- ³ Centre for the Science of Learning and Technology (SLATE), University of Bergen, 5015 Bergen, Norway
- Correspondence: james.kaufman@uconn.edu

Abstract: In this article we raise two linked questions in relation to positive creativity (creativity that can help transform the world to a better place): (1) Why does a great deal of positive creativity fly under the radar? and (2) What can be accomplished to enhance the visibility and frequency of positive creativity? Building off of the recent CASE model (Capital, Awareness, Spark, Exceptionality Model), which is focused on creativity that is hidden and overlooked, we unpack some of the reasons why positive creativity is often ignored in classroom settings. Using this framework as an intervention tool allows us, conversely, to identify those elements that can be enhanced to make positive creativity more visible and, overall, more present in education (and beyond).

Keywords: creativity; positive creativity; transformational creativity; the CASE model; education

1. Positive Creativity in a Negative World

We live in times that call out for creative solutions to a myriad of problems. We are in the midst of a worldwide pandemic that has killed millions of people. Those who have not themselves become ill or lost family are still prone to sleeplessness, depression, and anxiety focused on COVID-19 [1] or its related economic fallout [2]. Around the world, people worry about everything from climate change [3] to terrorism [4] to systematic racism [5]; even simply reading about these issues by 'doom-scrolling' on social-media negatively impacts people's emotional state [6]. Political differences are tearing families apart [7,8] as we continue to see increased violence against women [9] and, in the United States, the need for regular school shooter lockdown drills [10].

How can modern creativity theory offer insights that might help address this question? Creativity is often portrayed as a force for good across different levels of eminence. Big-C, or creative genius, is an easy argument to make, given that creative genius underlies any medical or societal advance [11]. Pro-c, or professional creativity, has been described as a city's most essential economic resource [12]. Lower levels of creativity, such as everyday (little-c) and personal (mini-c) creativity [13], can be associated with a variety of positive outcomes. These include many meaningfully-related benefits, such as enjoyment, increased feelings of purpose, better reconciliation with one's past, and a stronger sense of community [14].

Building off his conception of transformational giftedness [15,16], Sternberg [17] has called for transformational creativity (also called positive creativity) [18,19]. This concept is creativity that is undertaken with the goal of making a benevolent and creative impact on the world. Although it is a simple concept at its core, there are many nuances. Perhaps the most common (and rewarded) type of creativity is transactional creativity, which is creative actions that fulfil a social or literal contract. People are creative in exchange for getting gifted services, scholarships, or employment. Sternberg [17] notes other types, such as self-transformational creativity, in which a creator transforms themselves but not



Citation: Kaufman, J.C.; Glăveanu, V. Positive Creativity in a Negative World. *Educ. Sci.* 2022, *12*, 193. https://doi.org/10.3390/ educsci12030193

Academic Editors: James Albright and Gary McPherson

Received: 14 January 2022 Accepted: 21 February 2022 Published: 9 March 2022

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/). others. Such a dichotomy between the impact on one's self versus other people mirrors Forgeard and Mecklenburg's [20] reciprocal model of prosocial motivation and creativity, which examines the intersection of the motivation locus (i.e., intrinsic vs. extrinsic) and the intended recipient of one's creative efforts (self or others).

In this article, we raise two linked questions in relation to positive creativity: (1) Why does a great deal of positive creativity fly under the radar? and (2) What can be accomplished to enhance the visibility and frequency of positive creativity? Following a brief discussion of positive (and negative) creativity in education, we build on a recent model of hidden creativities [21] to unpack some of the reasons why transformational creativity is often ignored in classroom settings. Using this framework as an 'intervention tool' allows us, conversely, to identify those elements that can be enhanced to make positive creativity—in the case of students and teachers—more visible and, overall, more present in education as well as beyond educational settings.

2. Positive Creativity in Education

There are many possible approaches to teaching positive or transformational creativity, or otherwise implementing it into the classroom. Choi and Kaufman [22] highlighted a few ways to focus on transformative giftedness that may represent a starting point. They noted that schools could identify traditionally (or transactionally) gifted students and try to push them toward a positive (or transformational) approach. Conversely, there could be measures of transformative giftedness specifically developed to identify students with particular potential.

What complicates extrapolating these suggestions to positive creativity is that most methods of identifying or assessing traditional creativity are cumbersome, stagnant, or limited [23]. Most popular tests are based in some way on divergent thinking [24,25], which is more accurately a measure of creative potential [26]. The Consensual Assessment Technique [27] and comparable rating metrics [28,29] are highly regarded but very time and resource intensive [27,30]. Relying too exclusively on existing methods may be problematic for a number of reasons; most notably, such measures are intended to assess creative potential or ability. They are not designed to give any indication of how someone might implement their creativity—toward good, bad, or indifferent ends. Sternberg [31] has proposed and is working on a new measure of transformational giftedness designed to tap into how someone might deploy their intelligence (as opposed to trying to measure their level of intellectual ability). As deeply flawed as the fields of intellectual and educational assessment may be [32], we would argue they have advanced further than the field of creativity assessment.

Therefore, we would suggest an initial place to think about the question may be to consider how transformative or positive creativity may slip through the cracks in ways that transactional creativity does not—not to mention negative creativity, which works toward selfish ends [33] or malevolent creativity, which has specifically destructive aims [34]. Part of the reason is that the negative trumps the positive in such more mundane realms as the ongoing pervasive erosion of public discourse on social media [35]. Social and personality psychologists coined the term 'negativity bias' for the general human (and animal) tendency to give greater weight to negative events or personal traits [36].

It is particularly easy in a field such as education to focus on the many negatives and the part played by the presence of malevolent creativity. For instance, bullying and discrimination in the school context have received substantial attention over the years [37,38]. Although most teachers and scholars would shy away from using the label of 'creative' for such acts, the internet age has allowed many instances of surprising or novel bullying to be brought to attention [39]. Teachers themselves have been accused of malevolence when helping students learn potentially negative skills, such as hacking [40]. The temptation to focus on the individual attributes of 'bad teachers' is strong enough to override most attempts to consider more structural or systematic failings of the educational system [41]. Bad teaching is also discussed in terms of the many ways in which teachers can stifle students' creativity, despite the concept of schools 'killing' creativity being vastly overestimated [42]. Better communication of ongoing creativity research, from work being conducted on education to articulating the nuances of negative or malevolent creativity, can help dispel some of the myths.

Nonetheless, classrooms—as well as extramural spaces of education—are also the seat of positive or transformational creativity that rarely gets to be noticed or labeled as such. On most occasions, these expressions of creativity from students and teachers, who often struggle to overcome a myriad of micro and macro challenges, are discussed in terms of improvisation [43]. Making do with what is at hand in new and surprising ways in order to foster learning is a prime example of creative, improvised teaching. Improvisation itself has been recognized as a classroom phenomenon [44] and, when used deliberately, as an important teaching tool [45].

However, such labeling can also have negative consequences. Referring to positive creativity in school as improvisation continues a long legacy of reluctance to recognize young students' expression as 'creative' [46]. This hesitancy fosters the belief that creativity is reserved for adults (or, worse, for geniuses) and it reduces the chance of appreciating early manifestations of this phenomenon (for a critique, see [47]). In addition, it risks biasing our perception of the valence of the creativity that occurs in the classroom. If visible antisocial acts can be labeled as creative but the run-of-the-mill creativity that gives education its transformative value is not, then these two sides of the same construct are thereby also conceptualized, studied, and acted upon differently.

One reason behind the development of the Four C model of creativity was to highlight the importance of every level of creativity. Positive creativity can take place in the classroom across all levels of eminence, as is highlighted in Table 1.

Level of Creativity	Definition	Transactional Classroom Example	Transformational Classroom Example
mini-c	Creative actions or ideas that are personally meaningful.	A student has an insight that helps them study and achieve a better grade.	A student realizes a new way to explain a concept to a friend who is struggling.
little-c	Everyday creativity that others can enjoy.	A student wins the school science fair with a novel idea.	A student leads a school fundraiser to help victims of an earthquake.
Pro-c	Expert-level creativity that impacts a field or domain.	A teacher devises a new curriculum focused on improving test scores.	A teacher devises a new curriculum focused on fostering empathy.
Big-C	Creative genius that lasts for generations after the creator's lifetime.	An eminent scholar proposes a new way of assessing student performance.	An eminent scholar proposes a new way to help fight inequality in education.

Table 1. Transactional and Transformational Creativity across the Four C's.

3. The CASE Model of Creativity

We have previously posed the CASE model of creativity in an attempt to bring forward 'hidden' or shadow creativities [21]. This framework considers those times when a creative process or outcome fails to be acknowledged as actually creative, despite having some degree of novelty and usefulness. What the CASE model points to, therefore, are all the other important markers of creativity that impact our theories and, most of all, our everyday practices of discovering and cultivating creative expression. The acronym we chose stands for: Capital, Awareness, Spark, and Exceptionality. A lack of one or more of these elements makes it difficult for people to understand themselves as creative and/or for others to appreciate or even recognize their creativity.

To briefly expand on these four elements: Reduced Capital does not focus on financial capital (see, e.g., [48]) but rather the social and cultural resources needed to have creative

work validated. A lack of social networks or cultural tools to promote one's work can contribute to it staying in the shadows. Such gaps may range from not having someone who can finance a creative project to the absence of audiences who could use the creative outcome. Awareness refers to the creative actor's own understanding of their creativity. In this context, people are more likely to label their actions in different terms than creative even if that would be an accurate descriptor. The consequence here is that they are less likely to recognize and cultivate their creative potential. The Spark in CASE concerns the initial creative idea; as such, projects that lack spark are those that follow from and elaborate, sometimes in highly creative ways, the vision of others. Society contributes to this misconception that creativity 'belongs' to the initiators rather than those who follow in their footsteps. Last but not least, we have Exceptionality. A creative product may be novel and meaningful, but if it is too mundane or routine, it again risks being denied the label of creative. Exceptionality makes creative outcomes and people stand out and, at the same time, a lack of it pushes into the background those ideas and products that seem ordinary

What we propose in this article is to consider the issue of positive creativity, particularly in the way it is discovered and enacted in education, through the lens of the CASE model. We adopt this framework given the belief—to be further tested, including empirically—that much of what we call positive creativity is 'flying under the radar' of creativity researchers and educators. The CASE model can offer insights as to why such creativity may be overlooked and, more importantly, what can be accomplished to enhance its visibility and nurture its development in the classroom and across other domains of life.

3.1. Lack of Capital for Positive Creativity

rather than extraordinary.

Education is a setting in which various forms of Capital play a key role [49]. Economic Capital, especially its shortages, is generally blamed for making the activity of teachers more difficult. For example, tight budgets may not allow teachers enough time to cultivate and recognize the creativity of their students. Private school teachers tend to see their students as being more creative than do public school teachers [50]. Yet we are equally speaking about the social and cultural forms of Capital (e.g., access to supportive social networks and access to museums and other cultural resources), which are also salient given school missions of socialization and acculturation.

Even in this regard, teachers can have limited possibilities to connect their students to groups and communities in society that would be useful for their social and intellectual development. They may have limited access to important cultural resources, such as technology. Such deprivation can lead to an increase in inequality, especially in these times with the ongoing COVID-19 pandemic [51]. It is important to note that the positive creativity of teachers and administrators, particularly in rural or poor districts, has helped address some of these concerns. For example, there have been cases of school districts identifying public places that provide free internet access, establishing their own hotspots on school grounds, and even outright purchasing access plans for families in need [52].

More broadly, these types of shortages and limitations will affect different groups of students and teachers disproportionally, but they can be expected to impact the creativity across the board. One good outcome is that we can expect an expansion of creative expression in online and virtual spaces (for concrete examples, see [53]). A possibly stifling result is that incidents of positive creativity, including the collaborative and prosocial ways in which students and teachers helped each other during times of societal turmoil, will likely become commonplace. Yet such an abundance may lead to these incidents becoming less visible and, therefore, less studied. Further, there will be increased competition when it comes to selecting and promoting such creative acts to showcase, sponsor, or develop. Those creative actions without adequate social or cultural Capital may become ephemeral and quickly forgotten.

3.2. Lack of Awareness for Positive Creativity

A lack of Awareness of one's own creativity is problematic in its own right and may be the result of low creative metacognition [54]. Nearly half of students ranging from kindergarten to college undergraduates have been found to notably underestimate their creative thinking abilities [55]. Yet when creative metacognition is enhanced, one does not only reap the benefits of being able to maximize one's creative potential, there are also other advantages, such as increased task enjoyment [56].

Sometimes, however, what is also missing is an understanding of oneself as someone who engages in positive acts of creativity. In other words, someone may have low creative personal identity and not consider themselves to be a creative person [57]. Creative personal identity, which is linked to creative self-efficacy [58], tends to increase in late adolescence and early adulthood, or at the time when most people are finished with high school [59].

What might be some reasons underlying a general lack of creative Awareness in education? One reason is that both teachers and students may become accustomed to guiding their creativity towards reaching prosocial, valuable outcomes within the educational setting. For instance, inviting some structured uncertainty in the classroom [60] can be an innovative teaching technique. It is also a particularly needed tool during pandemic times, as teachers lose control over so many previously mastered aspects of instruction and curricula. Embracing a certain amount of ambiguity and improvisation may help teachers better respond to the needs of their students and continue developing inquiry-based forms of teaching. Such positive and creative developments do not refer to one specific teaching exercise or lesson plan, but rather an entire transformation of one's teaching philosophy that takes time to be articulated and to be recognized. Many teachers may not explicitly label such processes as creative, but simply as performing the required tasks in times of crisis.

Another reason why students in particular may lack awareness of positive creativity is the fact that they are rarely encouraged to reflect on their actions as creative. The example of creative learning [61] shows that it is relatively rare for students themselves to acknowledge their own learning as a creative process. Yet such experiences can lead to transformational outcomes for both themselves and others.

3.3. Lack of Spark for Positive Creativity

The absence of Spark is one of the most common reasons why school creativity, especially that of students, tends to remain unnoticed by much of society. Most of what is covered in the classroom are theories, ideas, and discoveries made by other people. Students are invited to use their capacity for positive creativity in order to understand, model, and recreate some of this educational content but rarely to invent their own approaches. Although the Spark of creativity is part of these acts of interpretation and appropriation of old material—and, in the case of positive creativity, the end of its use for prosocial—such forms of expression remain secondary compared to the Big-C creativity of the pioneers whose accomplishments are taught in school.

Consider the many small steps of positive creativity that lack Spark, which may take place in the classroom. One student may have an insight about the importance of recycling that they use to convince their parents to improve their household's efficiency. Another student may apply a basic principle of psychology learned in school to try to prevent a friend from being bullied. A third student may create their own examples based on the teacher's explanations in tutoring friends who are having difficulty keeping up with class content. A fourth student may come up with a new metaphor or analogy between a time in history and our current political climate. Such examples of positive creativity are only very slightly original; they are, rather, closer to mini-c [13] in that they are new to the creator. We argue they are crucial building blocks that lead to larger levels of positive creativity.

Teachers can also be the victims of the same assumed lack of Spark whenever their innovative teaching styles are grouped under bigger labels such as 'experiential education' or 'problem based-learning' instead of being celebrated as unique and effective in the

particular contexts in which they are enacted. Teachers themselves can recognize the creativity in what they carry out [62], even if others do not. Those who reinterpret the creative work of others and successfully adapt it in the classroom (or other settings) for the benefit of the greater good are demonstrating positive creativity.

3.4. Lack of Exceptionality for Positive Creativity

Similar to Spark, above, Exceptionality is what most would consider to be missing from classroom creativity. Students have typically been asked to copy or regurgitate correct answers and rely on rote memorization for decades, despite longstanding pleas for higher order thinking to be better utilized [63]. With the exception of specific groups, such as those labeled as gifted, there is little expectation of any further skills being utilized. In fact, the separation between the gifted and non-gifted tends to be counterproductive, particularly for recognizing creativity beyond the Exceptional, or, for this matter, recognizing the social aspects of gifted performance [64].

Engaging in positive creativity in an educational context does not need to strive towards the extraordinary. It is absolutely fine for it to be embedded in mundane practices and approaches to teaching and learning. Creativity as a habitual practice [64,65] is more related to Eastern beliefs of creativity [66,67]. Such conceptions also often include the idea of creativity as a benevolent and helpful tool [68], although we are not suggesting any type of causal relationship.

If all acts of positive creativity in the classroom, labeled as such, were expected to be Exceptional, they would be difficult to adapt to new contexts; think, for example, about teachers devising an extraordinary course but one that is so unique to that teacher's particular district, circumstances, or resources that it cannot be repeated or taught somewhere else. In the medium and long-term, such lack of replication would be detrimental for the transformation dimension of positive creativity [17]. We are not saying that great achievements in education cannot stand out or be Exceptional. We are rather arguing that we should be deliberate in creating spaces for less extraordinary and more ordinary creativity that supports learning, collaboration, and the development of healthy communities of inquiry. Classroom teachers largely recognize that creativity can and should be an unexceptional and everyday occurrence [69], so such a position does not need to be an uphill battle.

4. Looking Forward

Let us return to our two core questions: How can we make sure that positive creativity does not fly under the radar? How can we recognize and nurture positive and transformational creativity? First, we have highlighted a myriad of ways that positive creativity in the schools can remain unnoticed both in society and in the classroom. Students and teachers may be creative yet lack access to social and cultural resources and the awareness of their own creativity. They may see their individual contributions overlooked because they are derived from someone else's original ideas, they occur too frequently, or are too routine.

To nurture positive creativity, we can start by trying to ameliorate these issues. Inviting people in the community who are Pro-c in different areas can be a way of increasing access to Capital for students [70]. Many local experts are happy to speak to students about their jobs or avocations. Although the idea of authors reading to students is one that is perhaps most commonly accepted [71], there are many possibilities [72]. Why not have architects, historians, engineers, or librarians discuss how they integrate core school topics into their lived creative experiences? Many schools have access to founts of tacit knowledge [73], which can encompass jargon, specialized skills, practical intelligence, and many other tools that can help students in a variety of ways—among them providing the Capital that allows their positive creativity to be better recognized.

For Awareness, one strategy would be to work on enhancing students' creative metacognition, or knowing their creative strengths and limitations (as well as when to articulate their creativity; [54]). Students as young as kindergarten have shown some ability to demonstrate creative metacognition [74]. There has been some research looking

at what factors contribute to creative metacognition, such as higher cognitive ability [75]. There are some interactions of individual predictors and situational contexts. For example, people tend to be less accurate when they are asked to evaluate their creative work under unstructured conditions. However, people who are highly conscientious are less negatively impacted [76]. It would be useful as well to create interventions that focus on increasing awareness of positive creativity and try to foster self-efficacy in relation to this particular form of creative expression.

When it comes to Spark, what needs to be fostered is a greater understanding of how the roles of both initiator and follower of a creative idea are extremely valuable. Especially when it comes to positive creativity, the process leading from idea to achievement depends on the participation of other people and their willingness to support a particular cause. In social movements, for instance, being able to engage others in the co-creation of a collective course of action is essential [77]. Given that acts of positive creativity tend to have a prosocial orientation, the ability to collaborate for the realization of a creative project ensures its acceptance and durability. Teachers have an important part to play in educating young people to appreciate and engage in collaborative acts of transformational creativity. In order to do so, they need to challenge the myth of the lone genius [78,79] and the societal expectation, at least in Western cultural spaces, that truly creative people are mavericks who work alone and never follow the creative Spark of others. Last but not least, we have Exceptionality. Just as above, what is important here is to develop wider, more inclusive conceptions of creativity—including positive creativity—that recognize and appreciate both the exceptional and the ordinary, the extraordinary and the habitual [65]. We are not saying that students should not be introduced to exceptional acts of positive creativity and the oftentimes exceptional lives of such individuals [80]. These can serve as sources of inspiration and offer positive role models for them to follow. However, it is important to reflect on how these cases are framed and whether there is recognition of the fact that exceptional creative actions grow out of much more mundane actions and interactions and that it is an entire network of participation that supports their emergence. Demystifying Exceptionality in creative work supports more inclusive views of positive creativity without denying the importance or value of Big-C positive creative outcomes or individuals. In the end, one of the important tasks of educators is not only to foster positive creativity but to cultivate a deeper understanding of it and the numerous ways in which one can participate in such transformative acts. Students in particular can feel disempowered and, as a consequence, disengaged when presented with models they cannot aspire to become or emulate. Offering them a wider range of resources to help them think about and enact positive creativity (Capital), an increased cognizance and appreciation of themselves as creative individuals (Awareness), an interest in collaborating with others to advance a prosocial creative vision (Spark), and the conviction that ordinary creative acts can lead to extraordinary consequences (Exceptionality), are all part of advancing a positive agenda for creativity in an increasingly negative world. Making the CASE for positive creativity should be a key priority in education and in society.

Author Contributions: J.C.K. and V.G. conceptualized and wrote this paper together. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Conflicts of Interest: The authors declare no conflict of interest.

References

- 1. Sher, L. COVID-19, anxiety, sleep disturbances and suicide. *Sleep Med.* **2020**, *70*, 124. [CrossRef] [PubMed]
- Mann, F.D.; Krueger, R.F.; Vohs, K.D. Personal economic anxiety in response to COVID-19. *Pers. Individ. Differ.* 2020, 167, 110233. [CrossRef] [PubMed]
- 3. Clayton, S. Climate anxiety: Psychological responses to climate change. J. Anxiety Disord. 2020, 74, 102263. [CrossRef] [PubMed]
- 4. Usman, L.M. Terrorism and female teacher leadership in girls' secondary school. Int. J. Educ. Manag. 2018, 32, 669–688. [CrossRef]
- 5. Olusanya, B. Systemic racism in global health: A personal reflection. Lancet Glob. Health 2021, 9, e1051–e1052. [CrossRef]

- 6. Buchanan, K.; Aknin, L.B.; Lotun, S.; Sandstrom, G.M. Brief exposure to social media during the COVID-19 pandemic: Doomscrolling has negative emotional consequences, but kindness- scrolling does not. *PLoS ONE* **2021**, *16*, e0257728. [CrossRef]
- Baysha, O. Dividing social networks: Facebook unfriending, unfollowing, and blocking in turbulent political times. *Russ. J. Commun.* 2020, *12*, 104–120. [CrossRef]
- 8. Chen, M.K.; Rohla, R. The effect of partisanship and political advertising on close family ties. Science 2018, 360, 1020–1024. [CrossRef]
- 9. Elghossain, T.; Bott, S.; Akik, C.; Obermeyer, C.M. Prevalence of intimate partner violence against women in the Arab world: A systematic review. *BMC Int. Health Hum. Rights* **2019**, *19*, 29. [CrossRef]
- Nickerson, A.B.; Schildkraut, J. State Anxiety Prior to and after Participating in Lockdown Drills Among Students in a Rural High School. Sch. Psychol. Rev. 2021, 1–13. [CrossRef]
- Simonton, D.K. Creative Genius as Inherently Relevant and Beneficial: The View from Mount Olympus. Creativity. Theor. Res. Appl. 2018, 5, 138–141. [CrossRef]
- 12. Florida, R. The creative city. In *Cambridge Handbook of Creativity;* Kaufman, J.C., Sternberg, R.J., Eds.; Cambridge University Press: New York, NY, USA, 2019; pp. 623–639.
- 13. Beghetto, R.A.; Kaufman, J.C. Toward a broader conception of creativity: A case for "mini-c" creativity. *Psychol. Aesthet. Creat. Arts* **2007**, *1*, 73–79. [CrossRef]
- Kaufman, J.C. Finding Meaning with Creativity in the Past, Present, and Future. Perspect. Psychol. Sci. 2018, 13, 734–749. [CrossRef] [PubMed]
- 15. Sternberg, R.J. Transformational Giftedness: Rethinking Our Paradigm for Gifted Education. Roeper Rev. 2020, 42, 230–240. [CrossRef]
- 16. Sternberg, R.J. Identification for utilization, not merely possession, of gifts: What matters is not gifts but rather deployment of gifts. *Gift. Educ. Int.* **2021**, 02614294211013345. [CrossRef]
- 17. Sternberg, R.J. Transformational Creativity: The Link between Creativity, Wisdom, and the Solution of Global Problems. *Philosophies* **2021**, *6*, 75. [CrossRef]
- 18. Sternberg, R.J. Positive creativity. In *Current Research in Positive Psychology*; Kostic, A., Chadee, D., Eds.; Palgrave-Macmillan: Cham, Switzerland, 2021; pp. 33–42.
- 19. Sternberg, R.; Chowkase, A. When We Teach for Positive Creativity, What Exactly Do We Teach For? Educ. Sci. 2021, 11, 237. [CrossRef]
- Forgeard, M.J.C.; Mecklenburg, A.C. The Two Dimensions of Motivation and a Reciprocal Model of the Creative Process. *Rev. Gen. Psychol.* 2013, 17, 255–266. [CrossRef]
- 21. Kaufman, J.C.; Glăveanu, V.P. Making the CASE for shadow creativity. Psychol. Aesthet. Creat. Arts 2020. [CrossRef]
- 22. Choi, D.; Kaufman, J.C. Respecting the invisible: Transactional and transformational approaches to giftedness. In *Transformational Giftedness: Identifying and Developing Gifted Children Who Will Make the World a Better Place*; Sternberg, R.J., Ambrose, D., Karami, S., Eds.; Palgrave Macmillan: Basingstoke, UK, 2022, in press.
- 23. Kaufman, J.C.; Arrington, K.; Barnett, P.J.; Holinger, M.; Liu, X.; Xie, L. Creativity is our gig: Focusing on the positive and practical. *Transl. Issues Psychol. Sci.* 2022, in press.
- 24. Barbot, B.; Hass, R.W.; Reiter-Palmon, R. Creativity assessment in psychological research: (Re)setting the standards. *Psychol. Aesthet. Creat. Arts* **2019**, *13*, 233–240. [CrossRef]
- Plucker, J.A.; Makel, M.C.; Qian, M. Assessment of creativity. In *The Cambridge Handbook of Creativity*, 2nd ed.; Kaufman, J.C., Sternberg, R.J., Eds.; Cambridge University Press: New York, NY, USA, 2019; pp. 44–68.
- Runco, M.A.; Acar, S. Divergent thinking. In *Cambridge Handbook of Creativity*, 2nd ed.; Kaufman, J.C., Sternberg, R.J., Eds.; Cambridge University Press: New York, NY, USA, 2019; pp. 224–254.
- 27. Amabile, T.M. Creativity in Context: Update to the Social Psychology Of Creativity; Westview Press: Nashville, TN, USA, 1996.
- 28. Fiorineschi, L.; Rotini, F. Novelty metrics in engineering design. J. Eng. Des. 2021, 32, 590–620. [CrossRef]
- 29. Shah, J.J.; Smith, S.M.; Vargas-Hernandez, N. Metrics for measuring ideation effectiveness. Des. Stud. 2003, 24, 111–134. [CrossRef]
- 30. Kaufman, J.C.; Baer, J. Beyond New and Appropriate: Who Decides What Is Creative? Creat. Res. J. 2012, 24, 83–91. [CrossRef]
- 31. Sternberg, R. Transformational vs. Transactional Deployment of Intelligence. J. Intell. 2021, 9, 15. [CrossRef]
- 32. Sternberg, R.J. A Theory of Adaptive Intelligence and Its Relation to General Intelligence. J. Intell. 2019, 7, 23. [CrossRef]
- 33. James, K.; Clark, K.; Cropanzano, R. Positive and Negative Creativity in Groups, Institutions, and Organizations: A Model and Theoretical Extension. *Creat. Res. J.* **1999**, *12*, 211–226. [CrossRef]
- Cropley, D.H.; Kaufman, J.C.; Cropley, A.J. Malevolent creativity: A functional model of creativity in terrorism and crime. *Creat. Res. J.* 2008, 20, 105–115. [CrossRef]
- de Saint Laurent, C.; Glaveanu, V.; Chaudet, C. Malevolent Creativity and Social Media: Creating Anti-immigration Communities on Twitter. Creat. Res. J. 2020, 32, 66–80. [CrossRef]
- 36. Rozin, P.; Royzman, E.B. Negativity bias, negativity dominance, and contagion. Personal. Soc. Psychol. Rev. 2001, 5, 296–320. [CrossRef]
- 37. Smith, P.K.; Brain, P. Bullying in schools: Lessons from two decades of research. *Aggress. Behav.* 2000, 26, 1–9. [CrossRef]
- Swearer, S.; Hymel, S. Bullying and Discrimination in Schools: Exploring Variations Across Student Subgroups. Sch. Psychol. Rev. 2015, 44, 504–509. [CrossRef]
- 39. Bates, B. Teens in Cyberspace: Researchers Race to Keep Up. Pediatr. News 2009, 43, 18–19. [CrossRef]
- Pashel, B.A. Teaching students to hack: Ethical implications in teaching students to hack at the university level. In Proceedings of the 2006 Information Security Curriculum Development Conference, InfoSecCD '06, Kennesaw, Georgia, 22–23 September 2006; Association for Computing Machinery: New York, NY, USA, 2007; pp. 197–200.

- 41. Kumashiro, K. Reflections on "bad teachers". Berkeley Rev. Educ. 2012, 3, 5–16. [CrossRef]
- 42. Karwowski, M. School Does Not Kill Creativity. Eur. Psychol. 2021. [CrossRef]
- 43. Beghetto, R.A.; Kaufman, J.C. Teaching for creativity with disciplined improvisation. In *Structure and Improvisation in Creative Teaching*; Sawyer, R.K., Ed.; Cambridge University Press: New York, NY, USA, 2011; pp. 94–109.
- 44. Lobman, C.L. Improvisation: An analytic tool for examining teacher–child interactions in the early childhood classroom. *Early Child. Res. Q.* **2006**, *21*, 455–470. [CrossRef]
- 45. Berk, R.A.; Trieber, R.H. Whose classroom is it, anyway? Improvisation as a teaching tool. J. Excell. Coll. Teach. 2009, 20, 29–60.
- Sawyer, R.K.; John-Steiner, V.; Moran, S.; Sternberg, R.J.; Feldman, D.H.; Nakamura, J.; Csikszentmihalyi, M. Key Issues in Creativity and Development. In *Creativity and Development*; Sawyer, R.K., John-Steiner, V., Moran, S., Sternberg, R.J., Feldman, D.H., Csikszentmihalyi, M., Gardner, H., Nakamura, J., Eds.; Oxford University Press: Oxford, UK, 2003; pp. 217–242.
- 47. Glăveanu, V.P. Children and creativity: A most (un)likely pair? Think. Ski. Creat. 2011, 6, 122–131. [CrossRef]
- 48. Simonton, D.K. Cinematic Creativity and Production Budgets: Does Money Make the Movie? J. Creat. Behav. 2005, 39, 1–15. [CrossRef]
- 49. Sullivan, A. Bourdieu and education: How useful is Bourdieu's theory for researchers? Neth. J. Soc. Sci. 2002, 38, 144–166.
- 50. Eason, R.; Giannangelo, D.M.; Franceschini, L.A. A look at creativity in public and private schools. *Think. Ski. Creat.* **2009**, *4*, 130–137. [CrossRef]
- 51. Stantcheva, S. Inequalities in the Times of a Pandemic. Economic Policy. 2021. Available online: https://www.economic-policy. org/73rd-economic-policy-panel/inequalities-in-the-times-of-a-pandemic (accessed on 10 November 2021).
- Opalka, A.; Gable, A.; Nicola, T.; Ash, J. Rural School Districts Can Be Creative in Solving the Internet Connectivity Gap—But They Need Support. Brown Center Chalkboard. 2020. Available online: https://www.brookings.edu/blog/brown-center-chalkboard/ 2020/08/10/rural-school-districts-can-be-creative-in-solving-the-internet-connectivity-gap-but-they-need-support (accessed on 9 November 2021).
- Glăveanu, V.P.; Ness, I.; de Saint Laurent, C. Creative Learning in Digital and Virtual Environments: Opportunities and Challenges of Technology-Enabled Learning and Creativity; Routledge: London, UK, 2020.
- Kaufman, J.C.; Beghetto, R.A. In Praise of Clark Kent: Creative Metacognition and the Importance of Teaching Kids When (Not) to Be Creative. *Roeper Rev.* 2013, 35, 155–165. [CrossRef]
- 55. Urban, M.; Urban, K. Unskilled but aware of it? Cluster analysis of creative metacognition from preschool age to early adulthood. *J. Creat. Behav.* **2021**, *55*, 937–945. [CrossRef]
- Puente, D.R.; Cavazos, A.J. Creative metacognitive feelings as a source of information for creative self-efficacy, creativity potential, intrapersonal idea selection, and task enjoyment. J. Creat. Behav. 2020, 54, 499–507. [CrossRef]
- 57. Karwowski, M.; Lebuda, I. The big five, the huge two and creative self-beliefs: A meta-analysis. *Psychol. Aesthet. Creat. Arts* **2016**, 10, 214–232. [CrossRef]
- Karwowski, M.; Lebuda, I.; Wisniewska, E. Measuring creative self-efficacy and creative personal identity. Int. J. Creat. Probl. Solving 2018, 28, 45–57.
- 59. Karwowski, M. The Dynamics of Creative Self-Concept: Changes and Reciprocal Relations Between Creative Self-Efficacy and Creative Personal Identity. *Creat. Res. J.* 2016, 28, 99–104. [CrossRef]
- 60. Beghetto, R.A. Structured uncertainty: How creativity thrives under constraints and uncertainty. In *Creativity under Duress in Education*? Mullen, C.A., Ed.; Springer: Cham, Switzerland, 2019; pp. 27–40.
- 61. Gajda, A.; Beghetto, R.A.; Karwowski, M. Exploring creative learning in the classroom: A multi-method approach. *Think. Ski. Creat.* **2017**, *24*, 250–267. [CrossRef]
- Patston, T.J.; Cropley, D.H.; Marrone, R.L.; Kaufman, J.C. Teacher self-concepts of creativity: Meeting the challenges of the 21st Century classroom. *Int. J. Creat. Probl. Solving* 2017, 27, 23–34.
- 63. Sternberg, R.J. Four alternative futures for education in the United States: It's our choice. Sch. Psychol. Rev. 2004, 33, 67–77. [CrossRef]
- 64. Gläveanu, V.P.; Kaufman, J.C. Socializing Giftedness: Toward an ACCEL-S Approach. Roeper Rev. 2017, 39, 226–229. [CrossRef]
- 65. Glăveanu, V.P. Habitual Creativity: Revising Habit, Reconceptualizing Creativity. Rev. Gen. Psychol. 2012, 16, 78–92. [CrossRef]
- 66. Niu, W.; Kaufman, J.C. Creativity of Chinese and American Cultures: A Synthetic Analysis. J. Creat. Behav. 2013, 47, 77–87. [CrossRef]
- 67. Nowacki, B. Western model of creativity: Generalizability and hypothetical educational consequences for the "non-Western world". *Int. J. Creat. Probl. Solving* **2013**, *23*, 13–23.
- 68. Rudowicz, E. Creativity and Culture: A two way interaction. Scand. J. Educ. Res. 2003, 47, 273–290. [CrossRef]
- Cropley, D.H.; Patston, T.; Marrone, R.L.; Kaufman, J.C. Essential, unexceptional and universal: Teacher implicit beliefs of creativity. *Think. Ski. Creat.* 2019, 34, 100604. [CrossRef]
- 70. Beghetto, R.A.; Kaufman, J.C.; Baer, J. *Teaching for Creativity in the Common Core Classroom*; Teachers College Press: New York, NY, USA, 2014.
- 71. Moynihan, K.E. Local authors in the classroom: Bringing readers and writers together. *Engl. J.* 2009, *98*, 34–38.
- 72. Wines, C.; Pfeiffer, L.; Scott, A.; Woolcott, G. Eureka! Engaging classroom students in inquiry-based science lessons using local experts and contexts. *Teach. Sci.* 2018, *64*, 15–23.
- Cianciolo, A.T.; Sternberg, R.J. Practical intelligence and tacit knowledge: An ecological view of expertise. In *The Cambridge Handbook of Expertise and Expert Performance*; Ericsson, K.A., Hoffman, R.R., Kozbelt, A., Williams, A.M., Eds.; Cambridge University Press: New York, NY, USA, 2018; pp. 770–792.

- 74. Kaufman, J.C.; Beghetto, R.A.; Watson, C. Creative metacognition and self-ratings of creative performance: A 4-C perspective. *Learn. Individ. Differ.* **2016**, *51*, 394–399. [CrossRef]
- 75. Karwowski, M.; Czerwonka, M.; Kaufman, J.C. Does intelligence strengthen creative metacognition? *Psychol. Aesthet. Creat. Arts* 2020, *14*, 353–360. [CrossRef]
- Birney, D.P.; Beckmann, J.F.; Seah, Y.Z. More than the eye of the beholder: The interplay of person, task, and situation factors in evaluative judgements of creativity. *Learn. Individ. Differ.* 2016, 51, 400–408. [CrossRef]
- 77. Klandermans, P.G.; van Stekelenburg, J. Social movements and the dynamics of collective action. In *The Oxford Handbook of Political Psychology*, 2nd ed.; Huddy, L., Sears, D.O., Levy, J.S., Eds.; Oxford University Press: Oxford, UK, 2013; pp. 774–812.
- Montuori, A.; Purser, R.E. Deconstructing the Lone Genius Myth: Toward a Contextual View of Creativity. J. Humanist. Psychol. 1995, 35, 69–112. [CrossRef]
- 79. Plucker, J.A.; Beghetto, R.A.; Dow, G.T. Why isn't creativity more important to educational psychologists? Potentials, pitfalls, and future directions in creativity research. *Educ. Psychol.* **2004**, *39*, 83–96. [CrossRef]
- Gardner, H. The creators' patters. In *Dimensions of Creativity*; Boden, M., Ed.; MIT Press/Badford Books: London, UK, 1994; pp. 143–158.