



### **WORKING PAPER #2A**

# Ecological Perspectives on Social Care Practice, Education, Learning & Creativity CONCEPTS, TOOLS & FRAMEWORKS Norman J Jackson

#### Introduction

This Working Paper (WP) sets out to explore how the idea of ecologies for practice and leaning (Jackson 2016, 2019, 2020a & b) might be applied to social care professional practice and education and training that prepares learners for practice in social care. It supports a contribution to the Irish Creativity and Innovation in Social Care (CISC) Network's 2021 CPD initiative part of which is focused on creativity in social care work and education. The article forms around the proposition that being creativity, like learning and practice, is an ecological phenomenon that emerges as the practitioner interacts with their environment and the things that matter to them in their environment as they work. The WP is in two parts: Part 1 introduces some concepts, tools and frameworks that help us appreciate and make sense of learning and creativity as experiential/ecological phenomena and provides an illustration of how these ideas and tools might be used. The second part of the Working Paper is written in collaboration with Dr Louisa Goss. It is a work in progress seeking to show how these ideas can be applied to Social Care work and educational practice using a case study approach.

My ecology for practice: When I started writing this essay I had only a vague idea about what ideas I wanted to include. The structuring and presentation of the ideas and arguments emerged through the process of writing over about 4 weeks. Its form, together with the presentation I developed at the same time, continually emerged as I interacted with the ideas using the tools of my computer, word processing and power point software, past experiences and the knowledge and illustration resources I have curated over many years. I have never assembled and connected these ideas in this way before so it is, in that sense, original. In an

ecological sense you might also say I wove these things together and in the process I transformed my understandings and the resources I was using to create something new.

I might claim that the way I have used ideas and connected them to form the whole essay must involve a degree of creativity but the steps along the way in which new thoughts emerged and were put to practical use through reasoning have been lost. This is the reality of an individual's creativity when it is embedded in their practice. My intention is to try to explain to myself as much as to anyone else, how learning and creativity come about in the beautiful emergent, ecological world we inhabit – a world that is in continual formation and we are an integral part of that formation.

#### The value of an ecological perspective on practice, learning and creativity

I have been developing an ecological perspective on learning for about ten years. I have devoted time and effort because I see value in the idea which addresses what I see as two big problems. The first relates to the wicked challenge of preparing learners for the unknowable world of their future. Not the immediate future which we think we understand (although covid has shaken us out of the idea that the immediate future is simply a replication of the immediate past) but the more distant future of 20, 30 or more years ahead. Related to this is the way universities and education more generally responds to this challenge. I fear that higher education leans to heavily on approaches that were developed for a bygone era learners become enculturated into an institutionalised and academic way of seeing and experiencing learning: a way that is fairly linear, that mostly comes from listening to authorities, reading texts, answering questions through essays in the way the teacher expects, and generally complying with the rules of the institutional/academic system of learning and behaving using knowledge that is often abstract and decontextualised. The most efficient method of teaching lots of people stuff that is already known is through an explicit, linear process i.e. this is what we want you to learn --- if you turn up to my lectures I will give you the information you need --- absorb this information --- and then show me what you have remembered. More than this, higher education institutions create stable, safe, low-risk, low stress, environments for learning with no obstacles where, learning is scaffolded, encouraged and supported and where the information needed to learn is already codified in books, articles and easy to access lectures and power point presentations.

All practitioners know that learning and developing oneself to achieve something significant in the practice world outside institutions is not like this. It's a messy and often complex business, full of ambiguity, uncertainty and often conflict requiring negotiation and resolution. In this world knowledge is contextual, situational, partial, tacit and often embodied in the practice and

the behaviours of people. There are no textbook answers to a situated problem involving unique people in unique circumstances, and possibly no clear-cut answers, only partial answers that must be implemented and adapted to fit the context in an experimental way – monitoring effects and adjusting where necessary. Furthermore, the learning that emerges when a practitioner engages with a complex problem or situation, is often not what was expected. It's all far removed from the predictive outcomes-based learning we find in education.

The value in trying to develop the idea that learning and associated creativity is an ecological process is firstly, to seek a better explanation, and therefore consciousness of what learning to achieve something difficult in the turbulent world outside the classroom is really like. It offers another way of connecting the cognitive apprenticeships of novice learners who are preparing for professional practice to the expert and often hidden practices of experienced practitioners.

Secondly, it could help those in higher education who design and teach the curriculum, to pay particular attention to those aspects of pedagogy and curriculum that prepare learners for the ways and means of learning they will depend on in their long and complex learning lives. This 'preparation for a lifetime of learning' is at the heart of the higher education project and it is a shared responsibility between those who teach and support learners, and the learners themselves. Encouraging learners to recognise their own responsibility to develop themselves to the point where they can confidently create their own ecologies for learning is the most important collaborative project between teachers and learners and between novice practitioners and their supervisors, mentors and colleagues in work place settings.

Thirdly, it might help to open-up, in a constructive way, the meaning of what it is to be employable, and encourage people to think beyond the acquisition of generic skills to more holistic ways of knowing, being and performing in the social world of highly situated and contextualised learning and practice.

Implicitly, in this proposition is the fourth idea that learning ecologies and ecologies of learning are, in work settings, connected to ecologies of practice. By adopting an ecological perspective on learning in higher education we can make stronger connections to work practices that relate to a particular disciplinary field. Baker offers compelling arguments and illustrations for this connection in the field of legal education and practice (Baker 1991).

Fifthly, an ecological learning paradigm will help challenge those who believe that an effective curriculum design must reduce learning to a series of pre-specified learning outcomes and

assessment criteria. It will encourage and support those who believe that we can do more to help learners develop themselves as creative, self-directing and self-regulating human beings through more holistic and less prescribed ways of facilitating and assessing learning.

Finally, it might encourage higher education to view the higher education experience as not just an opportunity for learning linked to a particular programme of academic study, but as a lifewide opportunity for learning and personal development, valuing those aspects of a learner's lifewide curriculum that they themselves control. For it is in these extra-curricular spaces that they grow and practice their own ecologies for learning. Adopting and supporting a lifewide curriculum will help learners recognise that their development as a whole person is influenced by everything they do and who they are and what they can do is a synthesis of learning in every part of their life. This is particularly relevant when learners reflect on their past and how this shapes their ecologies for learning in the present.

#### Experiential world of practice, learning & creativity

When we engage in professional practice – such as a social care practitioner or social care educator might engage in everyday, we place ourselves in the practical and conceptual territory of learning through the experience of doing something in order to achieve something that is professionally valuable and reflecting on our experiences and the consequences of our actions. Through their doings both social care practitioners and educators share a common moral purpose namely to improve the lives of the people they are serving – clients or learners.

Learning through the experience of doing connects us to educational theorist John Dewey. For Dewey doing and the experience that emerges is always a dynamic two-way process. He referred to this process as a 'transaction': 'An experience is always what it is because of a transaction taking place between the individual and, what at the time, constitutes the environment' (Dewey, 1938: 43).

"When we experience something we act upon it, we do something; then we suffer or undergo the consequences. We do something to the thing and then it does something to us in return: such is the peculiar combination. The connection of these two phases of experience measures the fruitfulness of experience. Mere activity does not constitute experience." (Dewey, 1916: 104).

Dewey elaborates on this two-way process, suggesting that experience involves both 'trying' and 'undergoing' (Dewey, 1916: 104). 'Trying' refers to the outward expression of intention or

action. It is the purposeful engagement of the individual with their environment or in Dewey's words, "doing becomes trying; an experiment with the world to find out what it is like" (ibid). Through action an attempt is made to have an impact on the world. 'Undergoing', the other aspect of the 'transaction' in experience, refers to the consequences of experience on the individual. In turn, in attempting to have an impact, the experience also impacts on us. 'Undergoing' refers to the consequences of the experience for us (Ord 2012 p60).

The transactional of experience involving people interacting with and co-creating their environments, provides the foundation for the ecological perspective on practice, learning and other things like creativity that emerge through the relationships and interactions involving people, their environments and their doings.

Anthropologist, Tim Ingold (2000) reinforces Dewey's transactional ideas and tells us that we should not think of ourselves and our environments as separate things - we are indivisible bound together through an ecology of life and of living and experiencing and developing through our experiences of the world.

'organism plus environment' should denote not a compound of two things, but one indivisible totality" (Ingold 2011 p.19), "this totality is not a bounded entity but a process in real time: a process, that is, of growth or development" (ibid p.20).

In the experiential world of learning, creativity and other achievements are not abstract concepts, they are concrete, embodied, enacted and experienced in the day to day thinking and doings of individuals who inhabit and give substance and meaning to their thoughts and feelings through their actions as Glaveanu et al (2013) argue.

"action theories of creativity start from [the] epistemological premise .... of interaction and interdependence. Human action comprises and articulates both an "internal" and "external" dynamic and, within its psychological expression, it integrates cognitive, emotional, volitional, and motivational aspects. Creativity, from this standpoint, is in action as part and parcel of every act we perform .... Creativity exists on the other hand also as action whenever the attribute of being creative actually comes to define the form of expression (and, as such, we can talk of "creative work" as different from other types of work which, in themselves, don't completely lack the attribute of creativity)" (ibid p2)

The enactivist view of cognition argues that it arises through a dynamic interaction between a perceiving and acting organism and its environment. Cognitive structures and processes

emerge from recurrent sensorimotor patterns of perception and action and cognition is thus the exercise of skilful know-how in situated and embodied action within an environment (Thompson 2010).

mental life is also bodily life and is situated in the world. The roots of mental life lie not simply in the brain, but ramify through the body and environment. Our mental lives involve our body and the world beyond the surface membrane of our organism, and therefore cannot be reduced simply to brain processes inside the head." (ibid 2010 p ix)

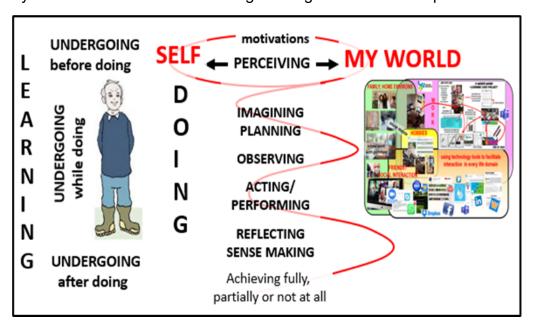
A person's cognitive world is not a pre-specified, external realm, represented internally by its brain, but a relational domain enacted or brought forth by that person's agency as they interact with their environment (ibid p 13) with their whole body. Indeed, the body itself, and the tools that are used to extend the body into its environment, may also be integral to cognition.

Cognition is embodied when it is deeply dependent upon features of the physical body of an agent, that is, when aspects of the agent's body beyond the brain play a significant causal or physically constitutive role in cognitive processing (Wilson and Foglia 2017)

How we act, perform and achieve (including our creative achievements) in our depends on many things. Firstly, it depends on our undergoing – what we now and can do as a result of our past experiences and what we can bring to a particular situation. Secondly, it depends on the particular environments we are situated in and interacting with: the particular parts of our lifewide world (Jackson 2011). In a typical day we may inhabit several different environments including – home, garden, work, and places in which we pursue hobbies and other leisure activities. Our interactions reflect our roles and identities, our relationships and histories of interaction, our purposes, values and beliefs, the problems and opportunities we encounter and more, and they determine our growth - our undergoing. All these things are connected in a complex ecology - a model for relational interaction which will be presented later and it is in this ecology that our learning and creativity emerge.

A visual representation of Dewey's transactional / interactional model of human experience that also incorporates Ingold's ecology of life idea and the enactivist and embodied view of cognition, is shown in Figure 1. The important point to make here is that this is the contextual and **situational** framework within which practice (intentional thinking and action) and related achievements like learning and creativity emerge in our personal, social and professional lives.

**Figure 1** Visual representation of Dewey's interactional model of experience in which the individual (me) perceives and interacts with their everyday world. Learning, creativity and other achievements emerge through this interactive process.



#### Tools to help us think about creativity

Creativity and how it is used to innovate is one of the primary concerns of the Irish Creativity and Innovation in Social Care (CISC) Network. Here I offer some concepts, tools and frameworks that provide some useful perspectives on creativity.

#### A concept of creativity that is appropriate for the world of practice

How we conceptualise or visualise creativity exerts a strong influence on our understanding of how it works in our practice. There are over 100 definitions of creativity so it is not surprising that there are many understandings of what it means. One of the simplest and to my mind most useful definitions is the one offered by Wikipedia.

Creativity is a phenomenon whereby something somehow new and somehow valuable is formed. The created item may be intangible (such as an idea, a scientific theory, a musical composition, or a joke) or a physical object (such as an invention, a printed literary work, or a painting).

The standard psychological definition of creativity contains two ideas – originality and value which often takes the form of usefulness (Runco and Jaeger 2012). Through numerous experiences and reflections on my own experiences

involving creativity, I have reached the conclusion that a more useful way of viewing creativity in personal, professional and educational contexts, is to see it not as a concept of originality but as a concept of transformation- a process and ability to transform situations, materials, ideas, people and anything else into new forms that have utility or other forms of value in the particular situation. It is worth noting that Paul Kleiman identified transformation as a one of five ways in which academics experienced creativity (Kleiman 2008).

Carl Rogers' concept of a creative process fits well my own experience of creativity, namely "the emergence in action of a novel relational product growing out of the uniqueness of the individual on the one hand, and the materials, events, or circumstances of their life" (Rogers 1961:350). I would however stress that product should not be viewed only a material object, but as a product of effort which could take many forms for example – a conversation, a dance or other actions that result in something happening like an event.

After watching a TEDx talk by Greg Bennick I adapted the transformational definition he used which aligns well to Carl Rogers' concept of a creative process.

"creativity is the process through which we take elements of ourselves and the world around us and transform them into something new that reflects what we want, what we need and what we can imagine. In the process we transform ourselves and the world" (adapted from Bennick, 2009)

The power in these transformational concepts of creativity is that they embrace products, processes and human capability and achievement related to the everyday lives and environments of people.

#### How do we think creatively?

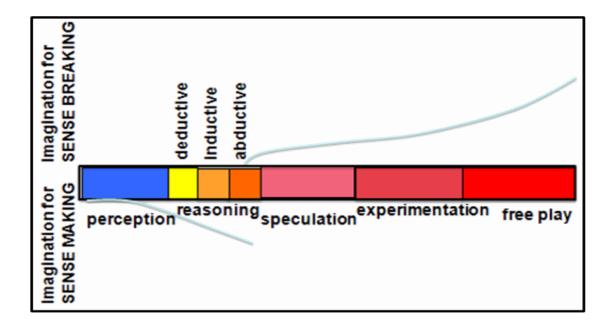
Concepts of creativity invariably emphasise the generation of new ideas with the implicit assumption that imagination is involved. Pendleton-Jullian and Brown (2016) provide a useful aid (Figure 2) that helps us visualise how we think, in particular they explain how imagination is involved in our thinking.

The initiation of a person's interaction with the world is always via perception – we perceive and try to comprehend our world through the flows of information we access through our senses. In this process of perceiving and comprehending we engage the whole of our

cognition – perception, reasoning and imagination which work together in a pragmatic way with our memory to try to understand the situations in which we are immersed.

When we explore and try to understand and solve a challenging problem or encounter a situation that is new to us, we use our perception, reasoning and imagination in a productive interplay. This can be represented as a continuum (Figure 2) in which imagination has the potential to connect to both perception and reasoning in a pragmatic and productive way (Pendleton-Jullian and Brown 2016).

**Figure 2** The cognitive continuum (Pendleton-Jullian and Brown 2016). Imagination connects in a pragmatic way to perception and reasoning.



They identify three forms of reasoning within their model of pragmatic imagination.

*Deductive* reasoning starts with a proposition or fact and proceeds to a guaranteed specific conclusion. If the original assertions are true then the conclusion must also be true.

Inductive reasoning begins with observations that are specific and limited in scope, and proceeds to a generalized conclusion that is likely, but not certain, in light of accumulated evidence. Much scientific research is carried out by the inductive method: gathering evidence, seeking patterns, and forming a hypothesis or theory to explain what is seen.

Abductive reasoning typically begins with an incomplete set of observations and proceeds to the likeliest possible explanation for the set. Abductive reasoning yields the kind of daily decision-making that does its best with the information at hand, which often is incomplete. A medical diagnosis is an application of abductive reasoning: given this set of symptoms, what is the diagnosis that would best explain most of them?

The pragmatic imagination conceptual framework helps us understand the way in which perception, reasoning and imagination are entangled in a productive dance that enables us to have creative ideas or mental visualisations and evaluate them in real time as we interact with our environment and the things in it that we care about. This conceptual framework shows us that imagination, which is so important in creative thinking, is used to make sense of the world and also to create entirely new senses.

**Figure 3** From perception to wisdom. Thinking ecologically (with the permission of artist Tom Chalkley).

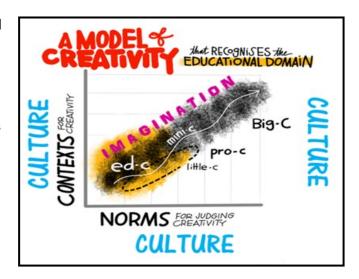


One of my favourite illustrations, that shows the way our mind, body and world interact to create meaning was drawn by cartoonist Tom Chalkley (Figure 4). His cartoon shows how our ancient hunter-gatherer ancestor made sense of his world as he experienced it through being and acting in it by taking in information through his senses, using his reasoning and imagination to connect, integrate, synthesise and make sense of and see beyond the obvious to create wisdom that he could share with others. In this way knowledge gained through personal experience becomes cultural knowledge shared by others. The cartoon reveals the way our thinking is itself ecological in the sense that new meaning is related to and drawn directly from our interactions with our environment and our past experiences of interactions as we reflect and draw out deeper meanings.

#### Creativity as a personal, educational, professional or cultural phenomenon

If we argue that cognition and achievements like creativity, are highly situated phenomenon growing out of the particular environments we inhabit as a result of the things we do, can we categorise these environments? Here I want to introduce the 4C (Kaufman and Beghetto ) and 5C (Jackson and Lassig 2020) (Figure 4). The models provide a tool for understanding the main contexts for creativity and embracing an inclusive concept of creativity that can accommodate individual's creativity along and across the life span from the humblest to the most significant of scales and impacts.

**Figure 4** 5C model of creativity (Jackson and Lassig 2020) that subsumes the 4C model of Kauffman and Beghetto 2008). When displayed in this format it becomes a tool for evaluating and understanding creative efforts and achievements.



The 4C model has four categories that are not uniform in character. Two of the categories might be viewed as meta-contexts within which particular situations and physical social-cultural environments are located.

**Little-c** personal everyday life situations and contexts for creativity can be present in any aspect of a person's life A person's everyday life is a meta-context containing many different domains of activity and experience that hold potential for imagination and creative action alongside and integrated with thoughts, actions and experiences that would not be considered creative. Little-c actions or outcomes are considered creative by people in the relevant everyday context. For example, a new dinner recipe could be deemed creative by family members.

The professional **Pro-c** meta-context contains a multitude of domains and work situations in which people with significant experience and expertise practice and create. The word 'professional' is misleading. More accurately this is a domain in which people have invested significant time and effort in developing themselves to the point where peers would consider them to be expert in their knowledge and performance. Thus, it does not have to be a

professional work environment for example serious hobbyists may have invested as much time and committed practice as someone who earns a living from their own expertise.

**Big-C** A third category of eminent creativity is not a meta-context, rather it is the recognition of exceptional achievements or performances that impact on culture in any context or domain where expertise is required. The eminent accomplishments of great inventors in artistic, scientific, technological or political fields inhabit this domain. Artists like Picasso, musicians like Mozart, scientists like Darwin, engineers like Brunel, writers like Shakespeare and leaders like Ghandi inhabit this category. Often the significance and value of an individual's accomplishments are only recognised after a considerable time has elapsed since their creativity was manifested. It typically takes two to three decades before someone receives a Nobel Prize for their ground breaking work.

**Mini-c** Is present in little-c, Pro-c and Big C, it refers to the cognitive and emotional process of constructing personal knowledge within a particular sociocultural context in order to develop/change understanding. It is a mental process associated with activities and experiences in the three other categories of creativity described in the framework, and in all stages of human development and activity, from the imaginings of a child that transforms his everyday world into a magical and mysterious world of giants and monsters, to the most sophisticated conceptual thinking necessary for breakthrough science.

"mini-c creativity is not just for kids. Rather, it represents the initial, creative interpretations that all creators have and which later may manifest into recognizable (and in some instances, historically celebrated) creations" (Kaufman and Beghetto 2008 p4)

Viewing creativity as a phenomenon involving unique people interacting in unique ways with their unique contexts, situations and environments means that any frameworks within which creativity is considered need to acknowledge the contexts, and material and social-cultural world in which creativity emerges.

ed-c Jackson and Lassig (2020) argue that there are compelling arguments for recognising ed-c as an important contextual and cultural domain within which a person learns to use, apply and develop their creativity. Firstly, education, at least in the developed world, is something that every person experiences for between 10 or 11 years and many people experience for up to 15 or 16 years. Secondly, it's a generic domain in which people have to conform to and behave within strong cultural norms, values and rules that impose strong constraints on the use of imagination and creativity. Indeed, education's preoccupation with such things as 'one

right answer', 'the correct way of doing something' and 'only valuing and measuring what can be predicted', may well inhibit or stifle creativity in many aspects of education. Education in fact, is a domain in which learners' natural tendency to creativity in a way they might experience in their everyday lives, is often severely restricted or curtailed.

You will notice that in the 5C model both imagination and mini-c (changes in understanding) are associated with the little-c, ed-c, Pro-c and Big-C contexts.

#### Orientations of creative effort and achievement

The implication of the 4C & 5C model for creativity is that creativity can be manifested in any environment but we can be more analytical in determining how we direct or orientate our efforts to be creative. In her grounded theory study of adolescent's creativity (Lassig 2012, 2020) noticed that within educational contexts (and beyond), the creative efforts and achievements of adolescents are oriented towards either: creative personal expression, creative boundary pushing or creative task achievement. These categories seem also to have wider application (Table 1).

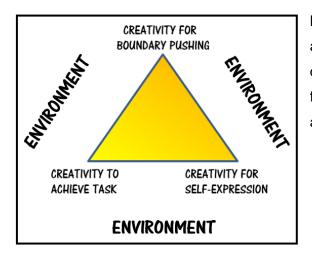
**Table 1** The creative efforts and outcomes of adolescents was manifested in three ways (Lassig 2012)

**Creative task achievement** was most common and refers to students using creativity to achieve a particular task or external demand. This was common in schools because much of students' learning is extrinsically motivated by learning tasks and assessments.

**Creative personal expression** involved students expressing their personality, emotions and ideas in novel ways.

**Creative boundary pushing** involved students extending the limits of typical and expected knowledge of adolescents in order to be unconventional and pursue new understandings and outcomes.

Creative acts and achievements may well involve a combination these different orientations which may also evolve over time. We can use this scheme to create a framework or tool that enables us to locate an individual act or a series of related acts (Figure 5). Each act will be embedded in one or more environments which will shape the nature of the creative efforts and the achievements from such efforts.



**Figure 5** Three orientations for creative efforts and achievements (Lassig 2012, 2020). When displayed in this format it becomes a generic tool for evaluating and understanding creative efforts and achievements.

## Moving towards ecologies of practice within which learning and creativity are embedded

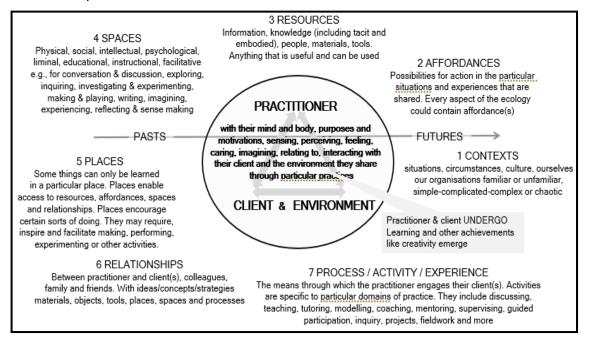
In my opening remarks I made the point that learning within an organised, controlled and supported institutional environment is not the same as learning in the turbulent and unstructured world of everyday practitioners. In this final section of the Working Paper I want to build on John Dewey's ideas outlined above and explain how we might view the dynamics within his interactional model, as an ecology of practice created by a practitioner (sometimes with others), within which learning and other achievements like creativity emerge. By trying to understand the dynamics of interactions and create narratives that describe our interactions and their results we develop a deeper understanding of what it means to learn and create.

The ecological perspective on practice sees learning as a consequence of individuals and groups of people relating to and interacting with their environment in purposeful/intentional and sometimes improvised ways. Figure 6 attempts to synthesise the elements contained in an ecology of practice that requires learning (Jackson 2016, 2019, 2020a & b). It provides a model that can be used to interpret a significant work project involving experience-based leaning. This model is also relevant to understanding how, why, when and where creativity can emerge in the process of trying to accomplish something.

The heuristic attempts to embrace the complex interactional and continuously unfolding dynamic of a whole, thinking, feeling, acting person, to their circumstances and contexts, their needs, desires and purposes, and the situations they are dealing with. This version of the framework has been developed for the context of a practitioner interacting with a client. When a practitioner encounters a new situation, problem, challenge or opportunity they use their senses and mind to perceive and comprehend the situation and act in ways that are appropriate for the context (Eraut and Hersch 2008). Effectively, they create and inhabit an

ecology whose components are outlined in Figure 6 that enables them to interact in a dynamic way with their client, the environment they share and the particular things that matter to them within it.

**Figure 6** A model for an ecology of practice in which learning and other achievements are embedded. This version emphasises the practitioner - client relationship embedded in their shared work environment (Jackson 2019, 2020). The labels 1-7 explain the key dimensions of the ecology as a person senses, perceives and interacts with their environment but they do not say how they interact. This is revealed in narratives of actions and achievements. The components of the ecology do not stand in isolation. They can and do connect, interfere and become incorporated into each other.



This model of an ecology for practice in which learning for the context and the specific situations are embedded embraces all three themes in the ecological world view of life - wholeness, relationships and continual formation. It *relates* a *whole* thinking, feeling, acting, caring person to their environment and the significant people in it. It *relates* the person's particular needs, interests, desires, perplexities and curiosities to the particular problems they are working on and to what they are trying to achieve in the particular contexts and situations in which they are acting. In return the person relates to the world and their interests and problems, using the skilled actions they have learned with tools and resources they have also learnt to use or they are learning to use through their actions. We might see this dynamic and the effects the interactions are having on the person as they learn to accomplish as a process of undergoing which is in turn part of the continuous process of formation that is our life.

In part 2 of this Working Paper we will try to apply these ideas and concepts to the context of the social care practitioner and educator and explore how creativity might feature in these ways of thinking about practice.

## Illustration of how these tools and ideas can be used to make sense of creativity as an emergent ecological phenomenon

In this essay I am anchoring my understandings of creativity and the way it emerges in practice to Dewey's interactional model of experience, in which I have incorporated the ideas of epistemology of practice, self-regulation and enactive/embodied cognition. I am suggesting that creativity can emerge in any context where a person or persons interacts with an environment in any aspect of their life – personal, social, work/professional, educational and that a person's creative efforts and achievements can be motivated by the need to express themselves, the fulfilment of a task or project or the desire to explore and discover entirely new things.

We often read creativity backwards – here is the final product of an act involving creativity, how did it come about? We then work backwards to join up the steps through which we think creativity happened. But we experience our own creativity moving forwards through our unfolding life - it's an emergent phenomenon as we engage with particular situations and make decisions about what to do as a particular situation unfolds. The ecological framework enables us to be more aware of the way in which creativity and related achievements emerge from the circumstances of our life. Accomplishments and achievements are brought about through the part deliberate and part opportunistic weaving together of the components of the ecology by the maker, sometimes in partnerships with others.

In this part of my essay I will draw on an experience that unfolded between March and June 2020. A summary is provided in the adjacent box. The narrative and accompanying diagrams (Figure 7 & 8) illustrate how we might build up a picture of an ecology of practice and it reveals the ways in which the mental inner and outer environmental world interact and

My experience in a nutshell In early 2020, before the pandemic, I went on holiday with my wife to NW Scotland. As we journeyed through the highlands and islands I was bowled over by the stunning landscapes. At six different points in the holiday I literally sat down amongst the rocks and made some rock towers by balancing one rock on another. This primordial urge was the result of my thinking and emotions being assailed by the sights, sounds, smells and tactile engagements with the landscape all around me. I felt impelled to act, I took photographs and made short videos, and I sketched scenes, later I used my photos and videos to make a short movie of the towers in their landscapes. These simple acts of self-expression gave me pleasure and satisfaction and my doings were entirely for myself although I shared the movie I made with family and friends, and more widely via YouTube. After I returned from holiday I analysed and wrote about my experience and developed an analytical tool to evaluate an experience of creative self-expression. The article and tool were published in a magazine and presented to peers at a conference.

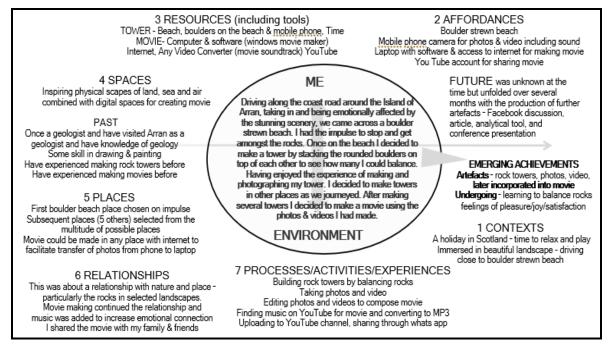
are woven together by the maker. The narrative shows how playing on a beach in Scotland can lead to ideas that have wider practical and conceptual value.

The urge to express myself as I drove through the beautiful landscape on the Scottish Island of Arran was compelling. The road hugged the seashore and



as we came to a boulder strewn beach, the urge to stop the car and walk onto the beach was overwhelming. There is a part of this story that is in my past. My first visit to Arran was on a school field trip when I was studying A level geology and geography. I later studied geology at university and then became a geologist. So my first thoughts were to read the rocks I was amongst and explain to myself that this beach was composed of cobbles and boulders of various shades of pink and grey granite which had found their way here from the hills behind the beach. You might also assume from this knowledge of my past that being amongst rocks and thinking about their geology was something I relished.

**Figure 7** Representation of my ecology of practice for making the rock towers on Arran and subsequently other parts of NW Scotland and using photographs of the towers to make a movie. The way the components were woven together is revealed in the narrative.

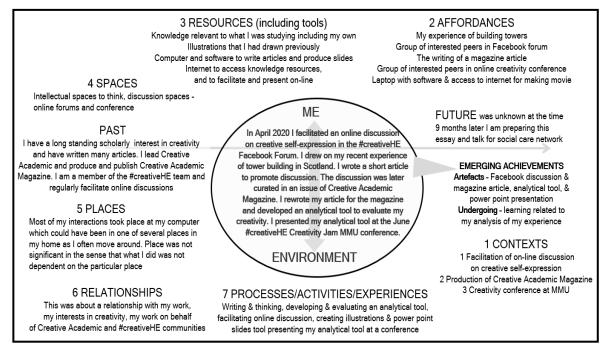


As we continued our journey, I decided I would build at least one rock tower on each day of our holiday (six in total). On the evening of the third day, while in the hotel, I decided to use my

photos and videos to create a movie. I have made many movies of the life in my garden, so I was familiar with the technique. Each evening I added the photos I had taken that day of the tower I had made so by the end of the holiday I had a 3 minute movie. I added some beautiful Celtic pipe music which added to my enjoyment of the movie.

A month after my holiday in Scotland, I was facilitating a week-long online discussion in the #creativeHE Facebook forum on the theme of 'creative self-expression'. I used my recent experience in Scotland to provide a personal illustration of creative self-expression (like I am doing now) (CAM 17). I wrote an article for the forum in which I interpreted the nature of the act of creative self-expression and developed a framework for self-evaluating the process (Jackson 2020c) (reproduced in Appendix 1). The article and tool were the vehicles for my intellectual exploration of the idea of creative self-expression and for codifying and sharing my understandings. They represent another suite of artefacts brought into existence through my acts of self-expression, this time using writing and illustrations as the medium and Facebook, Creative Academic Magazine and the #creativeHE Jam conference as the means to share my creations with my peers. In June 2020 I presented my ideas to peers at the #creativeHE conference (presentation available at: <a href="http://www.normanjackson.co.uk/creativejam.html">http://www.normanjackson.co.uk/creativejam.html</a>) Figure 8 summarise the key features of my ecology of practice through which these artefacts were produced.

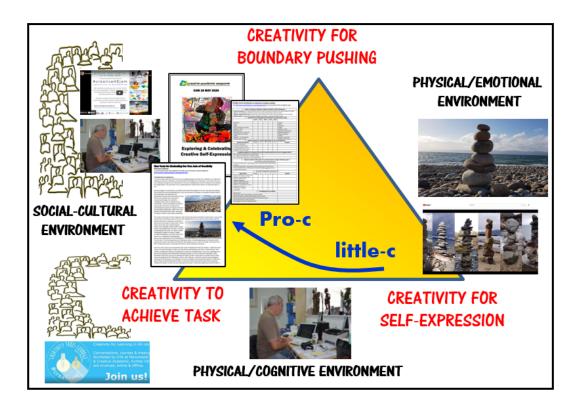
**Figure 8** A synthesis of my ecology of practice for exploring the idea of creative self expression and producing a number of artefacts to share my ideas including Facebook discussion April 2020, writing magazine article and developing analytical tool to evaluate creativity (April 2020), and presenting ideas to peers through conference (June 2020).



Using the 5C model of creativity and 3 orientations for creativity tools (Figures 4 and 5) as reference points I believe that the first suite of artefacts I made (stone towers, photos, videos, sketches and movie) involved 'little-c' creative efforts that were focused on self-expression for my own interest and wellbeing. However, when I began facilitating the on-line discussion, writing an article for the magazine, developing an analytical tool, and presenting my ideas at a conference, I shifted the focus of my attention and creative effort to achieving tasks and trying to expand the boundaries of my understanding within what might be considered Pro-c contexts for learning and achievement in a manner suggested in Figure 9.

**Figure 9** Mapping my creative efforts and achievements onto the three orientations for creative efforts and achievements tool.

**Explanation:** My first efforts to build some stone towers where acts of little-c creative self-expression inspired by the landscape while on holiday in Scotland. I then used my computer and software to ols to create (little-c) a movie (my second creative effort) which I shared through YouTube. My third set of creative efforts (Pro-c) were constructed in an office environment but with a social-cultural audience in mind. They included articles for a facilitated online discussion, an analytical tool, a conference presentation and a magazine article and publication and were positioned within the educational research social cultural environment.



In the interests of trying to understand the idea of creative self-expression I developed a new tool (Appendix 1) to evaluate my own creativity in the unfolding experience I am describing. This framework is entirely subjective and my generalised ratings are based on my

perceptions, my norms – my previous experiences of what I have judged to be creative. "Self-assessments are notoriously unreliable but CSA's [Creativity Self-Assessments] should be considered exactly what they are: self-reported activities, evaluations, and beliefs about people's own creativity abilities, process, or the construct itself," "but CSAs can offer information and insights beyond performance-based measures" (Kaufman 2019).

The self-evaluation tool (Appendix 1) is divided into five sections.

The first describes the contexts and circumstances for creative self-expression including the environment in which it was enacted, the affordances for action and the mediums and media through which it was expressed.

The second section identifies the mix of approaches used to learning, doing and creating together with the sources of motivation and the cognitive/psychological environment in which creativity emerged.

The third section identifies the elements in the process of self-expression. In this example I identify four elements. I try to rate each element in terms of what I felt was creative. The fourth section contains a subjective evaluation of the context of the activities involving creativity and the norms for judging creativity based on the categories in the 4C and 5C models of creativity (Kaufman and Beghetto 2008, Jackson and Lassig 2020).

The fifth section contains a subjective evaluation of the purpose of my creativity based on categories defined

Context & circumstances: I was inspired/mo:	thwited to ma	ske szene sz	nalistone to	wers by the	awesome	scenery while on holiday in the Scottish
Highlands, I also photographed and filmed th						
Affordances (poportunities for action): in the						
Mediums & media: the resterials of the land	scare, ohoto	eraphs, vid	eo. software	- moviema	ker, Whats	App. YouTube
						ng, doing & creating
	100/75	75/25	50/50	25/75	100/0	g,g
	200/73	/3/23	30/30	23/15	100)0	
Collaborative				_		Individual
Formal						Informal
Directed						Self-Directed
Planned - Askinwing a ariso or design					_	Emerged
Motivation – extrinsic						Mothation - Jetrinula
Motivated by reved						Mothested by Interest/curlosity
Motivated by alvaire to achieve/make						Motivated by love/jay/core
Problem solving or sense making						Playing or improvising
Cognitive						Emotional
Imagination - use of existing ideas						Imagination - my own idea
Something I have done before						Something I did for first time
3. Subjective	evaluation	of creativ	ity judged	against m	y own no	ms/experiences
Elements of the process	1 Attle	2	3	4	- 5	Comment
1 The idea of making towers					_	
2 Locating and making the towers		-		-	_	
3 Photographing/videoing the towers						
4 Making the movie in movie maker						
4. Subjective evaluation of the	ontext of t	he activiti	es involvin	g creativit	y and the	norms for judging creativity 1,0
Ottle -c creativity and associated mixi-c in an	appect of M	4				
ed-c creativity and associated mist-c in educa		rs .				
Aro-c creativity and associated mini-c in area						
<ol> <li>Subjective evalua</li> </ol>	tion of the	purpose o	f my creat	ivity bases	d on categ	ories defined by Lassig <sup>50,11</sup>
			mixture of			
I Creative Personal Expression - expressing a	spects of self	- personal	By, emotion		d ideas in	
novel suggs						
2 Creative Task Achievement - using creativit	to achieve.	a particular	task priede		d	
				real deman		
3 Creative Boundary Funking - extending typi	cal and expe	cted knowli	edge <u>in opde</u>	rnal deman	DIFW	
2 Creative Task Achievement - using creativit 3 Creative Boundary Fushing - extending typi understandings and outcomes.	cal and expe	cted knowli		rnal deman	DIFW	me
2 Creative Boundary Pushing - extending typi understandings and outcomes.	6. The	cted knowle value of ti	rder <u>in opde</u> he experie	rrul deman (30 puntae nce & out	omes to	
3 Creative Saundary Pushing - extending typi understandings and outcomes.  Types of Value	cal and expe	cted knowli	edge <u>in opde</u>	rnal deman	DIFW	me Comment
Creative Basedary Fushing - extending typi understandings and outcomes.      Types of Value Novelty - cone parapactives, new labor, mays.	6. The	cted knowle value of ti	rder <u>in opde</u> he experie	rrul deman (30 puntae nce & out	omes to	
2 Creative Baundary Pushing - extending typi understandings and outcomes.  Types of Value  Novelty - one parapactives, new lifes, may a of thirding / ways of datag (new skills)	6. The	cted knowle value of ti	rder <u>in opde</u> he experie	rrul deman (30 puntae nce & out	omes to	
2 Creative Boundary Pushing - extending typi understandings and outcomes.	6. The	cted knowle value of ti	rder <u>in opde</u> he experie	rrul deman (30 puntae nce & out	omes to	
3 Constitut Standary Fushing - extending typi understandings and outcomes.  Types of Value  Novelty - one parapatcher, new tifes, mays of release / ways of datag (new shife)  Arteliate - production of new	6. The	cted knowle value of ti	rder <u>in opde</u> he experie	rrul deman (30 puntae nce & out	omes to	
2 Creative Basedony Austriag - extending typi understandings and distances.  Types of Value Navelty -own prespectives, new lives, ways of thirtisticy / ways of disting (new width) Antiests - presist into of new object/risatis/Parasivings	6. The	cted knowle value of ti	rder <u>in opde</u> he experie	rrul deman (30 puntae nce & out	omes to	
3 Creative Basestey Austriag - extending typi understandings and outcomes.  Types of Value Nozelly -owa parapactives, and times although Artefacts - production of any adolescent and applications of any adolescent and application of any adolescent and application of any	6. The	cted knowle value of ti	rder <u>in opde</u> he experie	rrul deman (30 puntae nce & out	omes to	
3 Constitute Bisandary Publishy - entending typi undenstandings and out-of- ting and out-of- ting and out-of- househy - ever perspectives, serve lives, soays of thirding / ways of daing (new skitch) Antilistas - production of new John Charleston - production of new John Charleston - production of new John Charleston - publish of previous of Underlines - Justice of previous and Underlines - Justice of previous and Underlines - Justice on previous - published on previous Lindal Charleston - Justice of previous - published on previous - published on published on previous - published on	6. The	cted knowle value of ti	rder <u>in opde</u> he experie	rrul deman (30 puntae nce & out	omes to	
2 Constitute Basestony Pushing - entered fing typi understandings and outcomes.  Types of Value Novelby-one perspectives, even silves, seeps of thirdeling - program of dating fence solidy) Artelasts - post of dating fence solidy) Artelasts - post for the solidy of the solidy Artelasts - post for the solid outcomes abject/solid/parasite/spectives/ abject/solid/parasite/spectives/ Artelasts - post outcomes	6. The	cted knowle value of ti	rder <u>in opde</u> he experie	rrul deman (30 puntae nce & out	omes to	
2 Constitute Basestony-Austria; extending typi undentateding and outcomes.  Types of Value Basely one paragrations, one often Basely one paragrations, one often Grideling American of datas (new abits). Antificials production of new Johnstony-Austrian-State of the Undertwins-Lights on precision one Antificials—Indiana-State one Antificials—Indiana-State one Antificials—Indiana-State one Antificials—Indiana-State one Antificials—Antificials—Antificials Indiana-Antificials—Antificials Indiana-Antificials Indiana-Antification Indiana-Antificials Indiana-Antificials Indiana-Antificial	6. The	cted knowle value of ti	rder <u>in opde</u> he experie	rrul deman (30 puntae nce & out	omes to	
2 Constitute Basestony Austria; entered ling typi underestanding and outcomes.  Types of Value  Types of Value  Rossity vone paragratistus, even trivon, mays of triviology a long of datas from addity.  Antidatas – product lass of new paragratistus of new parag	6. The	cied knowli	rder <u>in opde</u> he experie	rral deman (yg purus nce & outs 4	comes to	
2 Constitute Basedony Auching, weathering typi underestating and advantes.  Types of Value  Topos of Value  To	6. The 1 small	cied knowli	ele (p.pple he experie 3	rral deman (yg purus nce & outs 4	comes to	
2 Constitute Miscolatory Austhings, extending typi untelleministatings and outcomes.  Types of Value  Thomas of Value  Thoma	6. The 1 small	tied knowledge of till the automater of	ele (p.pple he experie 3	rnal deman (yg purus nce & outs 4	comes to	
2 Constitute Manching Analysis, extending typic interdesiating and accounts Analysis.  Types of Value  Topics of Value  Topic	6. The 1 small	tied knowle value of ti	eder (p.p.) der he experier 3	rnal deman (yg purus nce & outs 4	comes to	
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2 Constitute Standardy Australey, extending typi utrahenizating and action reason.  Types of Value  Results of Value  Assistant of Value  Assistant of Value  Assistant of Value  Results of Val	6. The 1 smoll 7. my friends a scientific and scien	ted knowle value of ti 2 The au and family)	der (p.pde sexperier 3	or my crea	comes to	
2 Constitute Ministration Publisher, sensitivity and interesting the interesting and interesti	6. The 1 smoll 7. my friends a through an octoir makes a through an octoir makes a tition	ted knowle value of ti	der (p.pde sexperier 3	or my crea	comes to	

In the sixth section of the template I try to evaluate the value to me of the overall act of selfexpression in terms of production of novelty, artefacts, and the usefulness and aesthetic value of the experience and outcomes.

by Lassig (2012, 2020) which underpins her grounded theory of adolescents' creativity.

The final section of the audit tool evaluates whether the act was entirely for myself or whether my performance and the products of the act were shared with others.

Two profiles are developed for the acts involving creativity described above. Appendix 2 shows a self-evaluation profile for my acts of creative self-expression in building the towers and making a movie. Appendix 3 shows a different profile for the acts that involved writing an analytical article, developing and applying the tools I used to evaluate my experience.

#### **Concluding remarks**

I believe that the collection of experiences I described above engaged me creatively in two different ways that were summarised in Figure 9. The first was in an act of creative selfexpression. When we begin to express ourself we don't know where it will lead. As Rogers' points out self-expression is driven by the need to satisfy self. "We must face the fact that the individual creates primarily because it is satisfying to him [or her]." The desire to act is driven by feelings/emotions that grow out of our interactions with our social, cultural, material environment but it's our inner psychological environment, created in response to something, that provides the motivation for action and frames the search for ideas and ways on how to act. But there are other motives to invest time and effort in trying to achieve that as well satisfying intrinsic desires also satisfy more social-cultural interests, like the need to explore and share ideas that are of interest to a community of educators. I believe I satisfied both of these needs through the scenarios I outlined above. Furthermore, I believe that Carl Rogers' captures the essence of my creative efforts in his concept of a creative process, "the emergence in action of a novel relational product growing out of the uniqueness of the individual on the one hand, and the materials, events, or circumstances of their life" (Rogers 1961:350). I used resources from my environments – land and sea scapes, rocks, photos, ideas, knowledge and my own experiences, and I transformed them into new entities or artefacts for new purposes and shared these with the world. But, as Dewey predicts in his interactional model, I learnt a lot in the process of transforming these materials – I underwent and I am a different person to the one that stopped his car by the rocky beach in Arran and walked onto the beach to make a tower. That so much personal transformation stemmed from that moment is truly the most wonderous thing.

In Part 2 of this Working Paper we will consider how these ideas might be applied to Social Care practice and related educational practices.

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#### The Author



Norman Jackson is Emeritus Professor of the University of Surrey, England, and Founder of 'Lifewide Education' and 'Creative Academic'. He began his career as a geologist (university teacher/ researcher and mining & field practitioner). A midcareer change led him to roles in several national Higher Education agencies - Her Majesty's Inspectorate, Higher Education Quality Council, Quality Assurance Agency, University for Industry, Learning and Teaching Support Network, and the Higher Education Academy. In these organisations he performed many different roles: inspector, researcher, policy maker, facilitator, educational developer, broker and curator. Later he Directed the Surrey Centre for Excellence in Teaching and Learning (SCEPTrE) at the University of Surrey.

His work as an educator has formed around the challenges of encouraging higher education to take more seriously the creative development of learners and enable them to prepare themselves for the complexities, uncertainties and disruptions of long learning lives. At the Higher Education Academy he led work on 'creativity in higher education'. As Director of SCEPTrE at the University of Surrey, he developed and applied the idea of lifewide learning and education to give meaning and substance to the concept of lifelong learning. The ideas of ecologies for learning and practice emerged from this work and their educational value is now being championed through 'Lifewide Education' and 'Creative Academic', two social educational enterprises he founded.

He is Editor & Publisher for Creative Academic Magazine and Lifewide Magazine and his books include:

- Engaging and Changing Higher Education through Brokerage Routledge (2003)
- Developing Creativity in Higher Education: an imaginative curriculum Routledge (2006)
- Learning for a Complex World: a lifewide concept of learning, education and personal development Authorhouse (2011)
- Tackling the Wicked Challenge of Strategic Change: the story of how a University changed itself Authorhouse (2014)
- Exploring Learning Ecologies Chalk Mountain : Lulu (2016 & 2019)
- Ecologies for Learning and Practice: Emerging Ideas, Sightings and Possibilities Routledge (2020)

http://www.normanjackson.co.uk/http://www.lifewideeducation.uk/http://www.creativeacademic.uk/

APPENDIX 1 Profiling Tool to aid reflection on experiences involving creativity

Visit <a href="http://www.normanjackson.co.uk/creativejam.html">http://www.normanjackson.co.uk/creativejam.html</a> for an illustration of how it might be used.

1. Context, circumstances, affordances, mediums & media for creative self-expression								
Context & circumstances: I was inspired/motivated to make some small stone towers by the awesome scenery while on holiday in the Scottish								
Highlands. I also photographed and filmed them and then made a movie and shared it with my family via YouTube								
Affordances (opportunities for action): in the landscape and the materials of the landscape, in the tools (mobile phone camera and laptop)								
Mediums & media: the materials of the landscape, photographs, video, software - moviemaker, WhatsApp, YouTube  2. Estimated mix of contexts/approaches/motivations to learning, doing & creating								
2. Estimated						lg, doing & creating		
	100/75	75/25	50/50	25/75	100/0			
Collaborative						Individual		
Formal						Informal		
Directed						Self-Directed		
Planned - following a plan or design						Emergent		
Motivation – extrinsic						Motivation – intrinsic		
Motivated by need						Motivated by interest/curiosity		
Motivated by desire to achieve/make						Motivated by love/joy/care		
Problem solving or sense making						Playing or improvising		
Cognitive Imagination – use of existing ideas						Emotional		
Something I have done before						Imagination - <i>my own idea</i> Something I did for first time		
	evaluation	of creativ	ity iudgod	against m	v own nor	ms/experiences		
Elements of the process	1 little	2	3	4	5	Comment		
1 The idea of making towers	I muc	-	•	-		Comment		
2 Locating and making the towers								
3 Photographing/videoing the towers								
4 Making the movie in movie maker								
4. Subjective evaluation of the c	ontext of t	he activiti	es involvin	g creativit	y and the	norms for judging creativity 8,9		
little -c creativity and associated mini-c in any			,		•	, , ,		
ed-c creativity and associated mini-c in educational settings								
Pro-c creativity and associated mini-c in areas								
5. Subjective evaluation of the purpose of my creativity based on categories defined by Lassig 10,11								
– this could be a mixture of the three forms								
1 Creative Personal Expression - expressing as	pects of self	– personali	ty, emotions	s beliefs and	d ideas in			
novel ways  2 Creative Task Achievement - using creativity to achieve a particular task or external demand								
3 Creative Boundary Pushing - extending typical and expected knowledge in order to pursue new								
understandings and outcomes.								
6. The value of the experience & outcomes to me								
Types of Value	<b>1</b> small	2	3	4	5	Comment		
Novelty -new perspectives, new ideas, ways of thinking / ways of doing (new skills)								
Artefacts – production of new								
objects/tools/knowledge								
Usefulness – fulfils a practical need								
Aesthetic – fulfils emotional needs								
Affordance – new opportunities to act e.g								
opportunities to learn / give Transformation – changes to								
understanding								
unacrstanding	7.	The au	lience(s) fo	r my crea	tivity			
7. The audience(s) for my creativity  Me and only me								
Me and a small number of other people (e.g.	my friends a	nd family)						
Me and other people e.g. making it available	•		bsite					
Me and many other people e.g. posting on social media and actively promoting it								
Me and people working in my field / organisation								
Me and people in the future who might be interested								

**Appendix 2** My subjective evaluation of the involvement of creativity in building and photographing the stone towers and making a movie

<ol> <li>Context, circumstances, affordances, mediums &amp; media for creative self-expression</li> </ol>								
Context & circumstances: I was inspired/motivated to make some small stone towers by the awesome scenery while on holiday in the Scottish								
Highlands. I also photographed and filmed them and then made a movie and shared it with my family via YouTube								
Affordances (opportunities for action): in the landscape and the materials of the landscape, in the tools (mobile phone camera and laptop)								
Mediums & media: the materials of the landscape, photographs, video, software - moviemaker, WhatsApp, YouTube								
<ol><li>Estimated mix of contexts/approaches/motivations to learning, doing &amp; creating</li></ol>								
	100/75	75/25	50/50	25/75	100/0			
Collaborative						Individual		
Formal						Informal		
Directed						Self-Directed		
Planned - following a plan or design						Emergent		
Motivation – extrinsic						Motivation – intrinsic		
Motivated by need						Motivated by interest/curiosity		
Motivated by desire to achieve/make						Motivated by love/joy/care		
Problem solving or sense making						Playing or improvising		
Cognitive						Emotional		
Imagination – use of existing ideas						Imagination - my own idea		
Something I have done before						Something I did for first time		
3. Subjective	evaluation	of creativ	ity judged	against m	y own nor	ms/experiences		
Elements of the process	1 little	2	3	4	5	Comment		
1 The idea of making towers								
2 Locating and making the towers								
3 Photographing/videoing the towers								
4 Making the movie in movie maker								
				***				
4. Subjective evaluation of the c								
little -c creativity and associated mini-c in any			This activit	y took plac	e while on I	holiday		
ed-c creativity and associated mini-c in educa								
Pro-c creativity and associated mini-c in areas of expertise/work								
<ul> <li>Subjective evaluation of the purpose of my creativity based on categories defined by Lassig <sup>10,11</sup>  – this could be a mixture of the three forms</li> </ul>								
1 Creative Personal Expression - expressing aspects of self – personality, emotions beliefs and ideas in novel ways creation of stone towers & movie on holiday								
2 Creative Task Achievement - using creativity to achieve a particular task or external demand								
3 Creative Boundary Pushing - extending typical and expected knowledge in order to pursue new understandings and outcomes.								
6. The value of the experience & outcomes to me								
Types of Value	1 small	2	3	4	5	comment		
Novelty -new perspectives, new ideas, ways	23///0//			-				
of thinking / ways of doing (new skills)								
Artefacts – production of new						Memory of the towers was preserved in		
objects/tools/knowledge						the photographs and movie		
Usefulness – fulfils a practical need								
Aesthetic – fulfils emotional needs						The act of making and the movie artefact have aesthetic value		
Affordance - new opportunities to act e.g						Having the experience and the artefacts		
opportunities to learn / give						provided the foundation for future action		
Transformation – changes to						Provided me with an example of creative		
understanding						self- expression which I could relate to Lassig's categories		
7. The audience(s) for my creativity								
Me and only me Building the stone towers								
Me and a small number of other people (e.g. my friends and family)						The movie I made of the towers		
Me and other people e.g. making it available through an article or website								
Me and many other people e.g. posting on social media and actively promoting it								
Me and people working in my field / organisation								
Me and people in the future who might be interested								

**Appendix 3** My subjective evaluation of the involvement of creativity in using my experience of building the towers and making a movie to analyse the way my creativity was involved – in the process developing and applying new conceptual tools.

<ol> <li>Context, circumstances, affordances, mediums &amp; media for creative self-expression</li> </ol>							
Context & circumstances: I was inspired/motivated to make some small stone towers by the awesome scenery while on holiday in the Scottish							
Highlands. I also photographed and filmed them and then made a movie and shared it with my family via YouTube							
Affordances (opportunities for action): in the landscape and the materials of the landscape, in the tools (mobile phone camera and laptop)							
Mediums & media: the materials of the landscape, photographs, video, software - moviemaker, WhatsApp, YouTube  2. Estimated mix of contexts/approaches to learning, doing & creating							
2. Est					-	oing & creating	
6-W-1	100/75	75/25	50/50	25/75	100/0		
Collaborative						Individual	
Formal						Informal	
Directed						Self-Directed	
Planned - following a plan or design						Emergent Motivation – intrinsic	
Motivation – extrinsic							
Motivated by need						Motivated by interest/curiosity  Motivated by love/joy/care	
Motivated by desire to make/achieve Problem solving or sense making						Playing or improvising	
Cognitive						Emotional	
Imagination – use of existing ideas						Imagination - my own idea	
Something I have done before						Something I did for first time	
	a ovaluatio	n of croati	wity judge	d against	my own r	norms/experiences	
Elements of the process	1 little	2	3	4	5	Comment  While facilitating an online conversation	
Writing a narrative and using it to evaluate							
my creativity						about creative self-expression. Developed further for magazine article	
2 Developing and using an existing tool						Turtiler for magazine article	
(contexts & norms framework)							
3 Developing and using a new evaluation							
tool based on Lassig's creativity categories							
4 Developing this profiling tool							
5 Production of Creative Academic Magazine						The open-access publication vehicle for	
						this article	
4. Subjective evaluation of the context of the activities involving creativity and the norms for judging little -c creativity and associated mini-c in any aspect of life							
ed-c creativity and associated mini-c in educational settings							
Pro-c creativity and associated mini-c in areas							
<ol> <li>Subjective evaluation of the purpose of my creativity (categories defined by Lassig <sup>10,11</sup>)         <ul> <li>this could be a mixture of the three forms</li> </ul> </li> </ol>							
Creative Personal Expression - expressing aspects of self – personality, emotions beliefs and ideas in novel ways						In the presentation of article, tools and magazine	
2 Creative Task Achievement - using creativity	Facilitation & producing magazine						
3 Creative Boundary Pushing - extending typical and expected knowledge in order to pursue new						Extending my own understanding and	
understandings and outcomes.						sharing with peers through publication	
						and conference	
6. The value of the experience & outcomes to me							
Types of Value	1 small	2	3	4	5	comment	
Novelty -new perspectives, new ideas, ways						New perspectives developed through the	
of thinking / ways of doing (new skills)						mapping of experiences / outcomes	
Artefacts – production of new						New tools	
objects/tools/knowledge							
Usefulness – fulfils a practical need						Tools are useful aids to description and	
						evaluation	
Aesthetic – fulfils emotional needs						The act of making and the movie artefact	
						have aesthetic value	
Affordance – new opportunities to act e.g						Having the experience and the artefacts	
opportunities to learn / give						provided the foundation for future action	
Transformation – changes to understanding							
		<ol><li>The a</li></ol>	audience f	for my cre	ativity		
Me and only me							
Me and a small number of other people (e.g. n							
Me and other people e.g. making it available to							
Me and many other people e.g. posting on social media and actively promoting it							
Me and people working in my field / organisation							
Me and people in the future who might be into							