Exploring Creative Pedagogies for Creative Learning Ecologies

creative academic magazine

Issue 7A December 2016

CONTENTS CAM 7A

CREATIVE PEDAGOGIES for CREATIVE LEARNING ECOLOGIES

COMMISSIONING EDITOR'S INTRODUCTION

This is our first attempt to create an 'emergent magazine'. By this I mean we are not finding, editing and organising all the content before the magazine is published, rather we will launch the magazine in the hope and belief that over the course of the coming year we will be able to fill it with content that is relevant and useful to the topic we are addressing *Creative Pedagogies for Creative Learning Ecologies*.

We believe that if you create the affordance for people, who care about and are interested in something, stuff will happen - ideas will emerge as conversations take place and people share their understandings and practices. This is the belief that underpins our Creativity in Higher Education project which we launched in September 2016.

As an independent agent in the higher education ecosystem Creative Academic argues that higher education needs to pay more attention to students' creative development as an integral component of their academic development - creative and critical thinking are complementary elements of integrative thinking and they should be treated as such in our educational designs and teaching and learning practices. Through our *Creative Pedagogies & Learning Ecologies project* we are trying to foster and facilitate new conversations about the importance of creativity in higher education teaching, learning and students' development and achievements. In the coming year we are trying to bring together and connect educational practitioners and researchers, educational development teams, networks, communities, universities and colleges who share this interest and concern for students' and teachers' creative development, through a partly planned / partly emergent programme of activities relating to *creative pedagogies and creative learning ecologies*.

In 2016 we began to develop the idea of *creative ecologies* and our intention is to explore and develop the idea further by linking it to *creative pedagogies* - the imaginative ecologies that teachers create within which students learn and are able to use and develop their creativities. In this issue of the magazine we aim to publish at least one article each month that describes an approach to teaching and learning in which the objective was to enable learners to use and develop their creativity. We also try to bring together research and surveys that cast light on the idea of creativity and what it means to the people involved in facilitating creativity or who are trying to be creative. By considering lots of different perspectives and approaches, in different disciplinary, pedagogic and institutional contexts we hope to develop our understanding of what being creative means and what sorts of practices and behaviours encourage and enable students to be creative and to understand their creativity.

We believe in collaboration and cooperation and we welcome your involvement and participation in developing and creating this magazine. We believe in collegiality, openness and sharing and the knowledge we develop will be treated as open learning/ open educational resources. The ecology we are creating to explore these ideas is open to new ideas and to people and institutions who want to contribute. We are particularly keen to connect researchers to practitioners so that educational practice can be informed by evidence from research in this area. We are also keen to engage with the enormous range of learning contexts within higher education institutions in which students are encouraged to use their creativity. If you would like to share your own thinking and practices by writing an article for the magazine please do contact me.

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Creativity in Higher Education - Creative Pedagogies & Learning Ecologies
http://www.creativeacademic.uk/2016-17-programme.html

Our Creativity in Higher Education Project September 2016-17
Visit http://www.creativeacademic.uk/2016-17-programme.html to see updates

July 2016	#creativeHE conversation 'Exploring Creative Ecologies'		
September 2016	**Launch of Creative Pedagogies & Learning Ecologies Project** • Publication CAM 5 'Exploring Creative Ecologies' • Launch of #101creativeideas project		
October 2016 November 2016	• 'Developing the idea of ecologies for learning & creativity' presentation BERA Creativity SIG seminar at the University of Cambridge: Advancing Creativities Research: Making connections across diverse settings. • #creativeHE conversation 'Creative Pedagogies' 30/10 to 04/11 • Launch of Creative Pedagogies Online Survey aimed at identifying past and present practices and building an on-line resource.		
January 2017	• #creative Creativity Course (open course Creativity for Learning in HE) 16 - 20 January 17 • Launch of Student Challenge 'Stories of Creativity in Higher Education'. The aim is to discover examples of teachers who have encouraged and supported students' creative development in any subject or pedagogic context. 10 prizes of £100. A 'Students' Voices' booklet will be produced from the contributions. The winners will be announced during 'World Creativity and Innovation Week' in April.		
March 2017 Contribution to 'Open Education Week' Mar 27-31	• #creativeHE conversation 'Disciplinary Perspectives on Creative Pedagogies' 26-31st March • #LTHEchat Twitter conversation		
April 2017 Contributions to World Creativity & Innovation Week April 15-21	• Publication CAM 6 'Exploring the Role of the Body in the Process of Creation/Re-creation' - particular reference to teaching and learning processes. Edited by Lisa Clughen • #creativeHE conversation also exploring the role of body in creativity during World Creativity and Innovation Week • Publication of #101creativeideas project - 1 idea of an activity to encourage students' creativity will be posted on Twitter each day prior to WCIW		
May -July 2017	• #creative Creativity Course (open course Creativity for Learning in HE) 22- 26 May 17 • institutional professional development events (several planned)		
September & beyond	**SYNTHESIS** • Face to face event 'Exploring Creative Pedagogies & Learning Ecologies' • Publication of 'Exploring Creative Pedagogies & Learning Ecologies' book • Completion of CAM 7 'Exploring Creative Pedagogies & Ecologies'		

(Right-hand vertical columns:) #101creative ideas project · https://101creativeideas.wordpress.com/ · CAM 7 "Exploring Creative Pedagogies & Learning Ecologies" EMERGENT MAGAZINE · INSTITUTIONAL PROFESSIONAL DEVELOPMENT ACTIVITIES

Exploring Creative Pedagogies and Learning Ecologies

Norman Jackson

Norman is Co-Founder of Creative Academic and lead facilitator for the #creativeHE conversation described below.

Introduction

Where does one begin an exploration of ideas? It's often the hardest part of the journey. We decided to begin our exploration through a conversation on the #creativeHE platform established by Creative Academic Co-Founder Chrissi Nerantzi and this is the background paper I used to introduce the core concepts that underlie our exploration and some of the questions we need to ask.

#creativeHE
A conversational platform for exploring creativity in higher education
https://plus.google.com/communities/110898703741307769041

Exploring Creative Pedagogies & Learning Ecologies

An unfolding conversation from Sunday Oct 30th to Friday Nov 4th 2016
Facilitated by Norman Jackson with help from my friends Chrissi, Jenny, Simon, Sue, Sandra, Erica, Kate, Roger, Paul & John

In this #creativeHE conversation we want to consider the value of an ecological perspective on pedagogy. Specifically, we are interested in exploring how a teachers' **pedagogic practices** can lead to the creation of ecologies within which learners can use, develop and recognise their creativity

In a previous #creativeHE conversation in July 2016[1] we explored the idea that personal creativity can be viewed as an ecological phenomenon, *'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, people, or circumstances of his/her life'* [2:350]

A number of participants provided narratives of their own creative experiences and used a model of a learning ecology[3] as a reflective aid to demonstrate that personal creativity emerges from the ecologies we create to learn, develop and achieve something we value. This might be termed a **heutagogical**[4] approach i.e. learners created their own ecologies for self-determined, self-motivated and self-regulated learning to achieve something they wanted to achieve. We used the posts and articles created in this conversation to form issue 5 of our magazine CAM5[5].

In the November #creativeHE conversation we wanted to focus on **pedagogical** approaches to creating ecologies within which students learn, develop and achieve. Specifically, we were interested in exploring how a teachers' **pedagogic practices** created ecologies within which learners could use and develop their creativity.

The purpose of this new #creativeHE inquiry is to explore and evaluate the proposition that a teacher's pedagogic practices can be viewed as the means by which they create ecologies for learning and achievement that also encourage and enable their students to use and develop their creativity.

Q What concepts of pedagogy are used in higher education?
Q Are teaching and pedagogy the same thing?
Q What do we understand by a creative pedagogy? Is it synonymous with innovation?
Q In the same way that we might distinguish between creative teaching and teaching for creativity, might we also distinguish between a creative pedagogy and pedagogy for creativity?

Participants were encouraged EITHER to create a narrative describing an experience when they had designed and implemented a teaching and learning strategy to encourage and enable students to use and develop their creativity, OR create a narrative when they had experienced such a situation as a learner.

Using these personal accounts as a resource participants were invited to use the model of a learning ecology proposed in Figure 1 and 2 to reflect on and make sense of their experience critiquing and/or developing the model in the process. Through this process we hoped to gain a better understanding of whether the ecological model is useful and relevant to understanding these types of pedagogic practices.

During the course of preparing this background paper Erica McWilliam very kindly sent me an article she had written[6] in which she argues for a simple definition of creativity as *making a third 'thing' from two existing things or ideas*, rather than making something from nothing. I think that this is exactly what we were trying to do through the conversation by taking the ideas of *pedagogy* and *learning ecology* and seeing if they could be combined and integrated to make something different – an *ecological concept of pedagogy*.

Concept of a Learning Ecology

In nature an ecosystem comprises the complex set of relationships and interactions among the resources, habitats, and residents of an area for the purpose of living. Each organism within an ecosystem has its own unique ecology within the ecosystem through which it lives its daily life, so the whole ecosystem is made up of many individual ecologies competing or collaborating for resources and contributing to the system as a whole so that the whole system is maintained and sustained.

A similar conceptualisation can be applied to human ecological systems or ecosocial systems - the set of relationships and interactions among the people, resources, habitats, and other residents of an area for the purpose of living[3]. While all ecosystems are complex adaptive systems that learn to live with, and when necessary adapt to, their environment, the making of meanings and sharing of understandings (learning) are a primary interest and purpose of human ecosocial systems together with their continuous development and improvement[7].

Model of a Learning Ecology

To help explore, apply and evaluate the idea of a learning ecology I developed a model to explain the elements it contains (Figure 1 & 2)
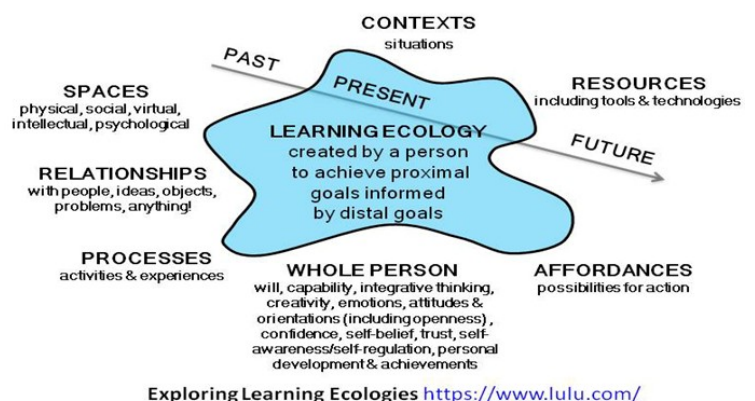
Figure 1 Components of a learning ecology[3]

CONTEXTS situations

PAST PRESENT FUTURE

SPACES physical, social, virtual, intellectual, psychological

RESOURCES including tools & technologies

RELATIONSHIPS with people, ideas, objects, problems, anything!

LEARNING ECOLOGY created by a person to achieve proximal goals informed by distal goals

PROCESSES activities & experiences

WHOLE PERSON will, capability, integrative thinking, creativity, emotions, attitudes & orientations (including openness), confidence, self-belief, trust, self-awareness/self-regulation, personal development & achievements

AFFORDANCES possibilities for action

Exploring Learning Ecologies https://www.lulu.com/

PAST
My past learning ecologies provided me with experiences through which I have learnt, developed and become aware of the affordances of my life. I can draw upon this in my new ecology for learning.

RELATIONSHIPS
With myself and with other people - both existing and newly developed, and with things, objects and tools and experiences that provide affordances in my physical, social or virtual environment.

PROCESSES
Enable me to explore the possibilities for action in my environment in order to learn, achieve and develop. They may be learning or task oriented and include the dimensions of time, space and purposeful action. My processes enable me to discover and create the affordances I need to learn, develop and achieve. They enable me to gain the feedback I need to develop my understanding and capability. They provide the means of connecting activities and experiences to create a more meaningful life.

CONTEXTS
The physical and social environment and situations I inhabit with their distinctive cultural and procedural settings physical characteristics and affordances

TIME PRESENT

LEARNING ECOLOGY created by me for a purpose, shaped by my proximal and distal goals

BEING A WHOLE PERSON
My learning ecology is self-motivated, self-directed and self-regulated. I have to trust that the ecology I build will enable me to achieve my goals. My will, agency and integrative thinking enable me to pursue my goals recognising the affordances in my life. My capability involves everything I can bring to a situation to deal with it and my self-belief enables me to work with whatever emerges. My honesty, integrity, openness and willingness to share helps me form good relationships with people who trust and respect me. My self-awareness enables me to monitor the effects I am having and change my performance to achieve better results and reflection helps me make better sense of what I have learnt.

SPACES
The spaces I inhabit or create for exploration, inquiry & learning. Liminal spaces – betwixt & between states of understanding. Smooth rather than striated spaces. Dialogic spaces for conversation and discussion. Creative spaces for imagining and reflective spaces for making meaning.

RESOURCES
Resources are things that have value to me in a particular situation or more generally in lots of situations. What makes something a resource is a matter of perception and my ability to utilise it. Resources help me learn and achieve my goals, they include information, knowledge, expertise, mediating artefacts – signs, tools and technologies

AFFORDANCES
Any situation contains ideas, 'objects' – things, people, circumstances, experiences that provide affordances – possibilities for action formed by my interactive relationship with the situation

FUTURE
My learning and development will be drawn upon in future ecologies which may also be inspired and influenced by my distal goals

Figure 2 Explanation of the components of a learning ecology (Jackson 2016a)

A key question in this #creativeHE inquiry is to what extent these models of personal learning ecologies can be used to represent teachers' pedagogic practices to encourage, support and enable students' learning and creativity

Every organism inhabits an environment: the organism shapes its environment and the environment shapes the organism. So it helps to think of an indivisible totality of 'organism plus environment' - best seen as an ongoing process of growth and development[8]. From an environmental perspective it does not make sense to talk about the environment in which we are learning without reference to ourselves as the organism that is perceiving and interacting with the environment we inhabit in order to learn.

Applying the idea of ecology to learning, personal development and achievement, including our creative achievements, is an attempt to view a person, their purposes, ambitions, goals, interests, needs and circumstances, and the social and physical relationships with the world they inhabit, as inseparable and interdependent. The idea of ecology encourages us to think more holistically and more dynamically about the way we inhabit and relate to the world. It encourages us to think in a more holistic way about our life: how we connect up the moments in our lives to form experiences and achievements that mean something to us.

Growing out of the exploration of this idea is a belief that our ecologies for learning embrace all the physical and virtual places and spaces we inhabit in our everyday lives and the learning and the meaning we gain from the contexts and situations that constitute our lives. They are the product of both imagination and reason and they are enacted using all our capability and ingenuity. They are therefore one of our most important sites for our creativity and they enable us to develop ourselves personally and professionally in all aspects of our lives. If this belief is well founded then surely, our ability to create our own ecologies for learning and development must be one of the most important capabilities we need for sustaining ourselves, achieving our purposes and maintaining our sense of wellbeing in a complex, ever changing and often challenging and disruptive world. Yet, to date, there has been little consideration of these ideas in the higher education curriculum or pedagogic practices.

What is Pedagogy?

In this #creativeHE conversation we want to explore whether the model of a learning ecology proposed in Figure 1 and 2 can be applied to formal educational environments. Specifically, whether teachers create, through their *pedagogic thinking and practices,* ecologies within which students learn, develop and achieve.

Dictionary definitions explain that pedagogy is the discipline that deals with the theory and practice of education. The word comes from the ancient Greek *paidagogos,* a compound comprised of "paidos" (child) and "agogos" (leader) ie 'to lead a child'. But pedagogy has also come to mean the practice, as well as the study of practice, of a teacher and how that practice is employed in particular educational settings and circumstances. Mark Smith[9] provides an interesting, informative and authoritative article on the history, meanings and uses of the term.

> A common way of approaching pedagogy is as the art and science (and maybe even craft) of teaching.

> the commonest view is that pedagogy is about teaching, and in the context of the academic curriculum it is about teaching a subject. In fact, this view of pedagogy is essentially a didactic view, 'the concerns of didactics are: what should be taught and learnt (the content aspect); how to teach and learn (the aspects of transmitting and learning): to what purpose or intention something should be taught and learnt (the goal/aims aspect)[10:236]

> viewing pedagogy in this way both fails to honour the historical experience, and to connect crucial areas of theory and practice. Here we suggest that a good way of exploring pedagogy is as the process of *accompanying learners; caring for and about them; and bringing learning into life*[9].

This deeply caring and relational view of a teacher's pedagogy is recognized by Giles and McCarty [11:67] 'pedagogy…. is always relational in nature, and as such is central to our everyday teaching strategies'. It's through these caring relationships and the teacher's encouragement and demonstration that 'we are making this journey together', that a climate or culture of trust and respect emerges. The importance of this dimension of pedagogy for encouraging students' sense of wellbeing and creativity should not be underestimated.

We can learn about the dimensions of pedagogy that facilitate the development of a culture within which students' creativity can flourish from Amabile and Kramer's study[12] of the socio-cultural work environment. They identified two types of event or condition which they termed catalysts and nourishers, that support what they term a person's *'inner work life'* - the constant stream of emotions, perceptions and motivations that people experience as they go through their work days[12:29-39]. Throughout the day, people react to events that happen in their work environment and try to make sense of them. These emotional reactions and perceptions affect their motivation for the work and have a powerful influence on their performance. When people have a positive inner work life, they are more creative, productive, committed to their work, and more co-operative toward the people they work with. When they have poor inner work lives, the opposite is true – they are less creative, productive, committed and co-operative.

The catalyst factor includes events that directly enable a person to make progress in their work. Catalysts include such things as: having clear goals (self-determined goals are more motivating), having autonomy to determine how to work, having access to sufficient resources when you need them, having enough time to accomplish the tasks, being able to find help when you need it, knowing how to succeed, being encouraged to let your ideas to flow. The opposite of catalysts are inhibitors; these make progress difficult or impossible. They are the mirror image of the catalysts, and include giving unclear goals, micro-managing, and providing insufficient resources etc..

Amabile and Kramer [12:131-33] identified four factors that *nourish* a work culture in which people feel supported and positively influenced their motivation, productivity and creativity namely:

1 Respect - managerial actions determine whether people feel respected or disrespected and recognition is the most important of these actions.

2 Encouragement - when managers or colleagues are enthusiastic about an individual's work and when managers express confidence in the capabilities of people doing the work it increases their sense of self-efficacy. Simply by sharing a belief that someone can do something challenging and trusting them to get on with it without inter-ference, greatly increases the self-belief of those involved in the challenge.

3 Emotional support - people feel more connected to others at work when their emotions are validated. This goes for events at work, like frustrations when things are not going smoothly and little progress is being made, and for significant events in someone's personal life. Recognition of emotion and empathy can do much to alleviate negative and amplify positive feelings with beneficial results for all concerned.

4 Affiliation - people want to feel connected to their colleagues so actions that develop bonds of mutual trust, appreciation and affection are essential in nourishing the spirit of participation.

These insights gained into the work place are likely to be true of educational environments where work effort is directed to learning and management of that enterprise is the teacher. A teacher's modelling and pedagogic actions shape the climate or culture in the ecologies they create for learning which encourage or inhibit students' creativity.

Inner Work Life System
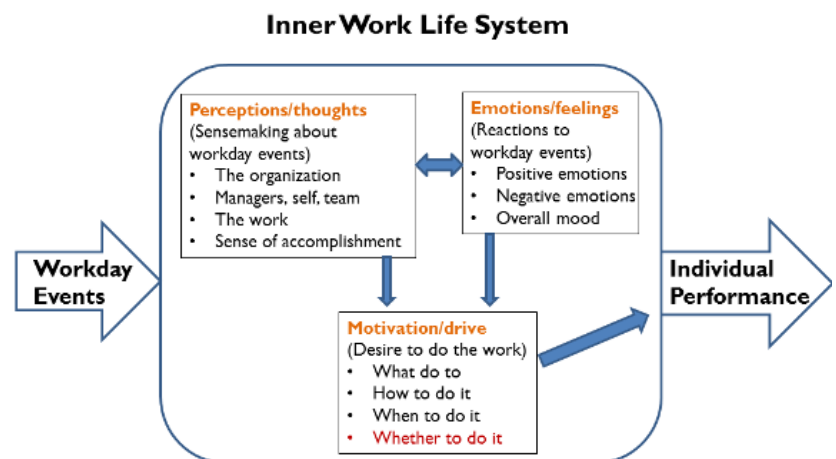
Amiable, T & Kramer, S. (2011). The Progress Principle

A broad concept of pedagogy

We have deliberately chosen the idea of a teacher's pedagogic practice for the subject of this inquiry (rather than teaching) because of the ecological affordance contained in the idea. The proposition we are adopting is that a teacher's pedagogy is fundamentally about their relationships with the learners they are accompanying and caring for, with their subject which they often care passionately about, with the resources they prepare to help students learn, with the activities for learning they design and animate through their teaching, with the assessment tools they create, with the technology they use and with the spaces they create and their students inhabit. Affordance for learning is in all these things and the teacher's role is to enable learners to recognize and act on these affordances. This broad ecological view of pedagogy, is similar to that adopted by Thomson et al[13:10] in their investigation into the signature pedagogies of artists and other creative practitioners.

> Pedagogy is more than teaching method, more than curriculum, more than assessment practice[14]. It is all these things, but it is also how they are made into patterns of actions, activities and interactions[15] by a particular teacher, with a particular group of students [in a particular context]. The concept of pedagogy encompasses relationships, conversations, learning environments, rules, norms and culture within the wider social context[16,17,]and may extend beyond school to community and public settings[18,19]. It takes in the ways in which what teachers and students do is framed and delimited within a specific site, a policy regime and the historical context[20].

A teacher's pedagogy is not fixed. Rather we should think of it as a dynamic expression of their knowledge, skill and judgement and sensing of what is needed because they are deeply in tune with the contexts, circumstances and situations.

Experienced and skilled teachers are likely to have developed a repertoire of pedagogic approaches, practices and orientations which they can select from depending on the particularities of the educational context. McWilliam[21] captures a sense of this in her threefold characterization of pedagogic orientations – *sage on the stage*, *guide on the side* and *meddler in the middle* but there are likely to be many other metaphoric representations of complex pedagogic practice. Perhaps it's more appropriate to think that every teacher has a repertoire of pedagogic practices and orientations that they chose from according to the circumstances, or the type of learning ecology, they want to create. In this way a complex ecology for learning and creative achievement might contain all three of McWilliam's pedagogic stances.
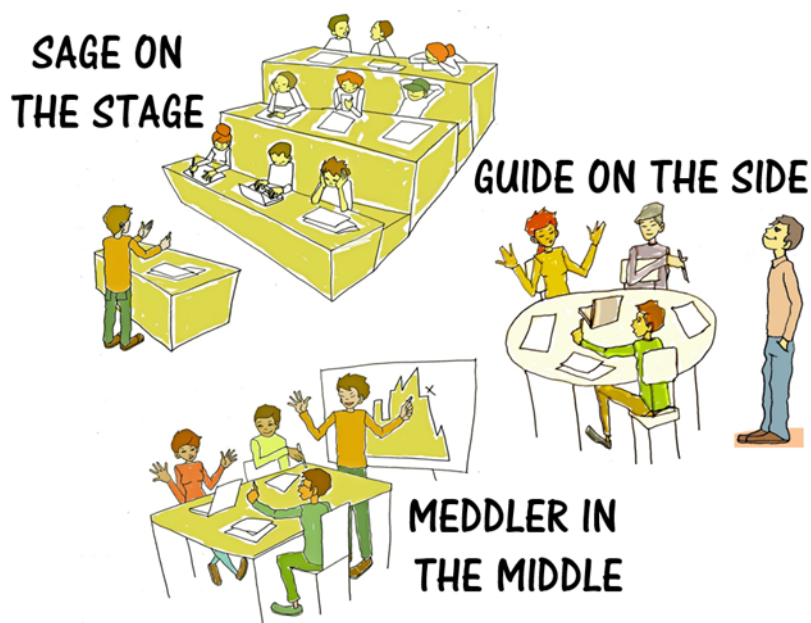
What impact does a particular pedagogic orientation (e.g. sage, guide, meddler) have on a teacher's ecologies for learning? Within the pedagogic narratives that are provided to this inquiry, what types of pedagogic orientation can be recognised? Are particular pedagogic orientations more effective than others at encouraging and enabling students to use and develop their creativity? What other metaphors might be used to describe the pedagogic orientations used to encourage and enable students to use their creativity?

Creative Pedagogy

Aleinikov[22] defines creative pedagogy as the science and art of creative teaching. "In its essence, creative pedagogy teaches learners how to learn creatively and become creators of themselves and creators of their future."[23].

Lin[24] suggests that there are three dimensions to a creative pedagogy: creative teaching, teaching for creativity and creative learning (Figure 3).
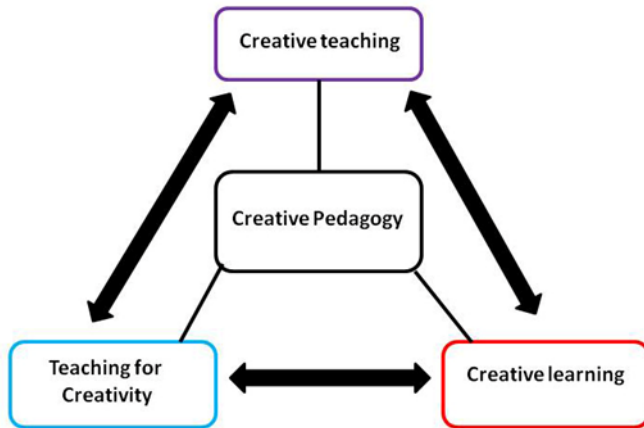

Figure 3 Components of a creative pedagogy [24]

According to Lin[24] *creative learning* is an essential part of creative pedagogy since its focus is on what the learner does (a learner's actions), while *creative teaching* focuses on what the teacher does (a teacher's actions). Lin refers to creative teaching as a creative, innovative and imaginative approach to teaching. When teaching creatively the teacher acts spontaneously as they respond to whatever emerges in the circumstances. The teacher may have planned the lesson one way, but a creative teacher has the courage to take the ideas that have arisen from the pupils and change the lesson to finish it in another way [25].

In their school-based study Jeffrey and Craft[26] made three discoveries relating to creative teaching and teaching for creativity. First, teachers both teach creatively and for creativity subject to the appropriate circumstances. Second, teaching for creativity may occur spontaneously in situations where it was not planned because the teacher is able to see new affordance as it emerges. Third, they accentuate that teaching for creativity is more likely to emerge from the context of creative teaching [26].

What other pedagogic knowledge sources cast light on the problem we are working with? We welcome the sharing of personal resources and links.

Ecologies for Learning Created by Teachers in a University Ecosystem

An ecological perspective on learning, requires us to also think about the ecosystem within which learning takes place. A traditional university course taught face to face is designed, organised and implemented by one or more academic teachers who have both disciplinary and pedagogic expertise, within an institutional socio-cultural environment that is full of support and resources to aid learning. There is a structure (timetable/lecture schedule/credit structure) and procedural framework (rules and regulations) within which learning takes place. Programmes are organised into units or modules with explicit objectives, content, resources and processes that engage learners in activities through which they learn, and some of their learning is assessed using one or more methods determined by teachers. The institutional ecosystem for learning includes people - learners, teachers and other professionals who help learners, a physical environment including classroom spaces, social spaces, resources centre and virtual spaces where learners and teachers interact for the purpose of learning. Figure 4 identifies the components of typical course-based learning ecologies that are designed and taught by a teacher and are hosted by an institutional ecosystem which provides the physical, cultural and virtual environment.

Affordance for learning *within the context of an academic programme* is everywhere. It is contained in the course, programme or module content, in the activities that teachers organise and facilitate for learners, in the *physical and virtual spaces* that are provided which support particular activities (both academics and social) and in the *intellectual spaces* that the pedagogic activities promote.

Affordance for learning and development is also found in the *resources* including books, journals, computers, software and other tools and mediating artefacts that are used, and in the teaching and learning *processes* and practices that are used to engage learners and encourage them to form relationships for learning with these resources. Affordance for learning and personal development is also found in the additional support and advisory services the university provides, and in the *relationships* and interactions between teacher and students, and student peers, and in learner's own responses to all of these things. Furthermore, some academic programmes also contain affordances for learning in contexts and environments that lie outside the institution for example through work placements and internships, community-based projects, fieldwork and study visits and more.

Figure 4 Typical ecology for learning developed through a teacher's pedagogic practice and associated with a taught course within an institutional ecosystem (refined from Jackson[3:244]).

The model of a learning ecology outlined in Figure 1 & 2 provides a framework for the elaboration of this pedagogically constructed learning ecology which links to the past experiences of the teacher, exists during an unfolding present and will inform future pedagogic adventures. In this ecological model of pedagogy everything has the potential to interact.
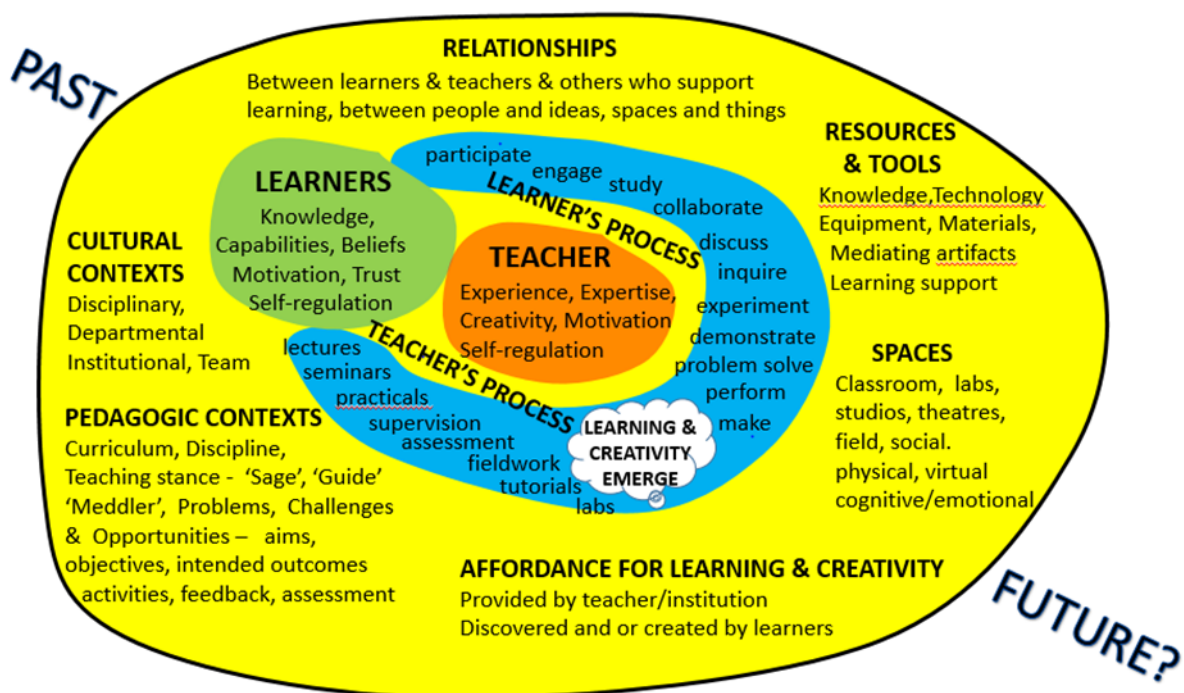
Is it useful to you as a teacher to see your pedagogic thinking and practices as the means to creating an ecology within which both you and your students are embedded and containing all the environmental, cultural, intellectual and psychological elements that influence learning and ultimately learners' and your affordances for creativity?

Beyond the academic programme the university ecosystem provides affordance for student learning and development (including creative development) in the myriad of activities that populate the co-curriculum, and in the volunteering and paid work opportunities around campus. The university campus is a microcosm of the world and students' can find and create for themselves affordance in all manner of things. Indeed, the more creative a student is the more likely they will find affordance in the world around them.

Some of the most important spaces for students' creativity lie outside the academic curriculum. While this is to be celebrated, the question is why can't the academic curriculum also be suffused with such affordance?

Ecological Perspective on Personal Creativity

There are many definitions of creativity and most seem to have the idea of bringing something new and original into existence as their core conception without providing any sort of context. It's as if creativity and invention happen in isolation from the world of their creator. Because of this I have come increasingly to appreciate and respect the way Carl Rogers framed the idea of personal creativity as, *'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, people, or circumstances of his life'* [27:350]

The bottom line is that creativity is an ecological phenomenon. It's about human beings having thoughts that are stimulated by their relationship and interactions with the world around them. A creative thought is the result of a person interacting cognitively, physically, emotionally, virtually with something in their world ideas, people, things, problems, situations and experiences, and a multitude of other things and this interaction triggering a novel thought. These thoughts are often the result of connecting/combining two or more things to create some-thing that is different to the things that were connected. McWilliam and Taylor[6] catch this beautifully in their idea that creativity is often the result of *making a third 'thing' from two existing things or ideas*, rather than making something from nothing. Perhaps we might capture the idea in 1+1=3!

Rogers' view of personal creativity and how it emerges from the circumstances of our life, is an ecological concept. The ecological metaphor affords us the most freedom and flexibility to explore and appreciate the ways in which we and our purposes are connected to our experiences and the physical, social and psychological world we inhabit. I believe that our creativity lies in seeing affordance in an idea, thing or situation and then acting on this affordance by doing something useful and novel (at least to ourselves) with what is afforded[29]. If we translate this way of thinking to the formal teaching and learning environment then the most important things a teacher does through their pedagogic practice is to create affordance for learning, enable learners to appreciate that affordance, and equip them with the means and motivation to make use of it. If the object of affordance has a creative dimension then their pedagogic task is to encourage and enable learners to make use of it.

A learning ecology contains not only the physical, virtual and social spaces that form the circumstances of our lives, but also the mental / psychological spaces that enable us to think about ideas and situations in a variety of ways. If we translate this way of thinking to the formal teaching and learning environment then the most important things a teacher does through their pedagogic practice is to create affordance for learning, enabling

Much of the affordance or possibility for students' creative thinking and action lies in the spaces that teachers create through their own pedagogic practices and it will be interesting to see what sorts of spaces are revealed in the pedagogic narratives that are grown through this inquiry.

The mental / psychological spaces we create within our own ecologies for learning, development and achieve-ment are rich and varied. They are one of the most important ways in which we create new affordance. Giles and McCarty[11] consider that the creation of 'deeply meaningful learning spaces' is an essential pedagogic task and they illustrate this idea though examples of spaces for contemplative thinking, appreciative inquiry, and the devising and acting of plays. So one of the most important acts of teachers is to create, animate and facilitate the conditions within which these important intellectual, imaginary, emotional and practical spaces can flourish and students can access and make use of them. Here are just a few of the many types of space a teacher may create, with appropriate encouragements and permissions, through their pedagogic practices[3]:

Spaces for conversation & discussion - our learning ecology spaces are dialogic spaces within which conversation and discussion can take place between an individual, themselves and the people involved in their learning ecology. Within our learning ecologies we create spaces for conversation with others and ourselves that are relevant for a particular purpose, goal or learning project. So much of the knowledge we need to solve everyday problems is gained through social interaction and the transmission of tacit through conversation and observation.

Space for exploring, inquiring & adventuring - for venturing into territory that is not well known or understood. In these spaces we have to deal with uncertainty, ambiguity and perplexity as we encounter things we have not encountered before. We often don't know what we need to know when we start a significant new learning project so we have to engage in what John Dewey (cited in Cook and Brown[29]) called 'productive inquiry': finding out what we need to know in order to do the things we need to do. Productive inquiry can be applied to all situations : from scientific investigations to situations that crop up in our daily lives. It is a capability we need in all working contexts. 'Productive inquiry is not a haphazard, random search; it is informed or disciplined by the use of theories, rules of thumb, concepts and the like' [29:62].

Learning is often a messy business. "Messy" learning is part trial and error, part waiting and waiting for something to happen, part excitement in discovery, part trying things in a very controlled, very step by step fashion, part trying anything you can think of no matter how preposterous it might seem, part excruciating frustration and part the most fun you'll ever have. Time can seem to stand still – or seem to go by in a flash. It is not unusual at all for messy learning to be …um …messy! But the best part of messy learning is that besides staining your clothes, or the carpet, or the classroom sink in ways that are very difficult to get out … it is also difficult to get out of your memory! (http://www.learningismessy.com/quotes/)

Spaces for imagining & reflecting - one of our greatest assets as a human being is to be able to create mental spaces for us to think about our past experiences and interpret and draw meaning from the memories we reconstruct. Our ecologies for learning provide the mental space for us to look back on the past and imagine possibilities for the present grown from experiences of the past. We use the term reflection to describe this process: a term that conjures up faithful reproductions of situations remembered rather than creative manipulations of those memories. We have the wonderful ability to imagine, to ask 'what if' and generate entirely new possibilities from situations we have experienced. This enables us to create mental models that help us make good decisions and plans about what to do. Through our imagination space we can generate ideas, connect and combine them to all sorts of things, select and synthesise particular thoughts and create entirely new perspectives and possibilities. We can project from what we know into the future and imagine entirely new and novel futures. This envisioning process is fundamental to our creativity: it gives it a reason to exist.

A learning ecology thus both hosts and stimulates our imagination which feeds into the full range of cognitive processes whenever we are confronted with a problem or engage with an opportunity. Imagination that is connected to, and integrated with other cognitive processes, is the way we perceive the affordance in a situation[28]. Because our imagination is unique to us sometimes we are the only ones who can see such affordance so it's not surprising that when we act on it we are able to make interesting and unique contributions to the world.

Ann Pendleton-Jullian and John Seely Brown[30] coin the term 'pragmatic imagination' to emphasise the important role played by imagination in enabling us to see affordance in a situation, idea or thing. 'The Pragmatic Imagination pro-actively imagines the actual in light of meaningful purposeful possibilities. It sees opportunity [affordance] in everything'. At the neurological level creative insights can arise in two processing modes— spontaneous and deliberate[31;1015]. An energetic ecology for learning and achievement creates an environment within which both of these modes of gaining creative insights are possible.

Spaces for making and/or making something happen : Visualising, designing and making things i.e. bringing new things into existence is an act of creation. 'Maker spaces' are an essential ingredient of education and training in disciplines like engineering, art and design, architecture, and fashion and textiles but it is not a feature of most disciplinary educational processes unless you see the writing of an essay as a 'making' process. But it can be, and that is the point, a learning ecology can contain spaces for making physical or virtual objects or for making something happen (eg the making of an event). Thomas and Brown[32] argue that *Homo Faber or* "(Hu)man as maker, recognises our ability to create through making.

> *Homo Faber* is more than simply making; it is making within a social context that values participation. It is akin to what Michael Polanyi[33] has described as "indwelling," the process by which we begin to comprehend and understand something by connecting to it and, literally, living and dwelling in it. In that way, making also taps into the richness of becoming. We learn through making, building, and shaping not to produce something static, but to engage in the process of participation[32]

Spaces for play : Arguably, all creativity involves some sort of play or playing around with ideas. CAM2[34] describes many different approaches to play being used in higher education.

> When teachers re-imagine the learning process as one in which students are entitled to experience the pleasure of the rigour of complex thinking through serious play, learning is enhanced by a richer educational scheme of curriculum and pedagogy.[6]

Play, at least in humans, is not necessarily all-or-none, but can exist in matters of degree. An activity can be characterized as play, or described as playful, to the degree that it contains the characteristics listed here: Play is activity that is (1) self-chosen and self-directed; (2) intrinsically motivated; (3) guided by mental rules; (4) imaginative; and (5) conducted in an active, alert, but relatively non-stressed frame of mind[35] (Gray 2013).

In his article on cultivating the entrepreneurial learner, John Seely Brown talks about the epistemology of playing (Homo Ludens – man the player – Huzinga[36].

> The key aspect of play is not that subtle – it's kind of a permission to fail, fail and fail again until you get it right… Perhaps most importantly, think about an epiphany. How do you play with something until it just falls into place?... Brilliant teachers are brilliant in being able to create epiphanies for kids.. how do we use play as a way to amplify the chance for that to happen?[37]

Spaces for play may also include spaces to perform. For example, role play is a way of encourages learners to put themselves into someone else's shoes[38]. To see a situation through the eyes of the person whose role they are adopting. Role play requires the learner to use their imagination and their empathy and embody the way they imagine another person would view and respond to a situation. It provides opportunities for learning in both the affective domain, where emotions and values are involved, as well as in the cognitive domain where experiences are analyzed. It encourages learners to see the world from another perspective, assess a situation and respond to it in the way they think a person who is not themselves would respond.

Spaces for synthesis and integrative thinking - all the spaces in our ecologies for learning provide affordance for seeing the world as we experience it and as we imagine it. Providing us with new sorts of information and knowledge with which to make better or different senses of what it means. Our ecologies for learning contain within them the possibility space for synthesising, integrating and reconstructing our understandings and feelings to make entirely new interpretations and meanings by combining and connecting ideas.

Such ways of thinking about our mental spaces for creativity require us to integrate the imaginative, associative and synthetic ways of thinking, with the critical and analytical ways of thinking. Puccio et al [39]l offer a simple visual aid to help us understand the idea of integrative thinking and how it is used in problem solving (Figure 5).
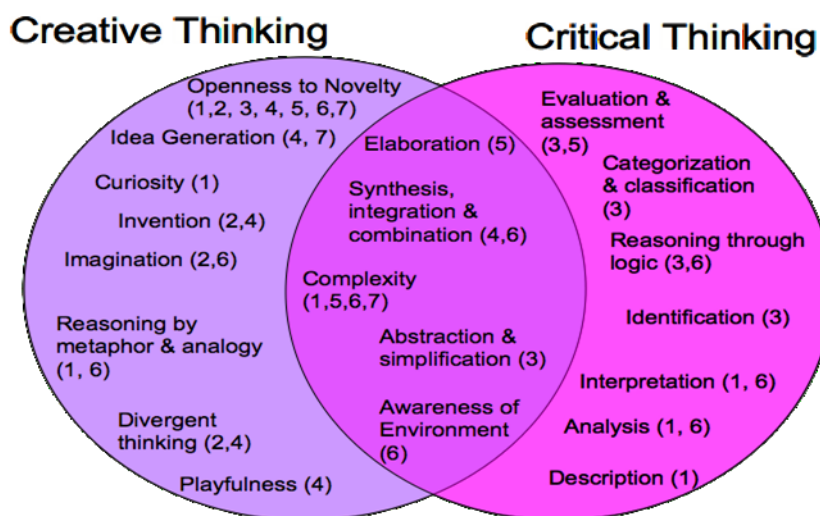

Figure 5 Integration of creative and critical thinking in problem solving[39]

Integrative thinking combines creative generative ways of thinking, in so far as they will lead to connections that have not been thought of before, and critical ways of thinking so that from such connections new possibilities can be analysed and evaluated and then brought into existence.

Creating spaces within which students' creativity can flourish is an important task in a pedagogy for creativity. It will be interesting to see and map what types of spaces are created by teachers in the creative pedagogic narratives shared through the #creativeHE conversation.

But one thing is certain, mental processing alone might result in novel ideas but it is not enough to bring something new into physical existence. Mental processing must be accompanied by the package of dispositions, qualities and capabilities necessary for success when tackling difficult problems and challenges. Ron Barnett [40;15] was right when he said "'Will' is the most important concept in education. Without a will nothing is possible." Will forms around purposes which are usually deeply rooted in our distal goals - the sort of person we want to become, our ambitions and the contributions we want to make in life. It becomes operationalised in the particular things we try to do and accomplish. Being creative is a matter of personal choice and sometimes necessity in particular circumstances together with our ability to work with whatever emerges through our engagement with these circumstances.

Perceptions of Creativity and Being Creative

The meanings we give to creativity and being creative frame our thinking and actions and the way we experience being creative. 'Being creative' has both narrow and broader meanings[41]. The *narrow* meaning immediately leads one to think of activities directly associated with artistic self-expression - like singing, acting, dancing, painting and making films. The *broader* sense encompasses those activities associated with what Richard Florida calls the 'creative class'. This includes the arts but also involves activities such as architecture, design, advertising, video game development etc. The *broadest* meaning embraces the idea that we can all be creative in any aspect of our lives and that being creative includes any idea or act that is unique to our own capabilities and vision. This includes actions which can range from developing your own food recipes, setting up a charity to address a local problem, establishing a website to support a network of people who share an interest, writing your own music and singing our own songs, building our own house, writing a blog post or developing a new practice or procedure at work. The list of possibilities is infinite but fundamentally creativity is about bringing ideas, objects or products, processes, performances and practices into existence. This may be accomplished by an individual - personal creativity, or a group of people working together - co-creativity. A creative outcome is often a combination of individual and collective creativity.

Macdonald[42:123-4] distinguishes two different kinds of creativity namely, production-related and discovery-related. Production-related creativity doesn't only mean novel inventions and product designs, he means the creation of something of value that never existed before, in *any creative medium*: canvas and paint, clay, bronze, electronics, architectural materials, machined metal, welded metal, paper/computer and words, bio-chemistry, and an infinite number of other media for creative self-expression. The product or creation need not be novel in all respects, but something about it must be novel, and it must have value − aesthetic value, utilitarian value, inspirational value, or value of some other kind.

Discovery-related creativity on the other hand has more to do with seeing something in a different/novel way. One of its manifestations is the scientific breakthrough where insight leads to yet another layer being peeled off the onion of perplexity and truth. Another manifestation of discovery-related creativity is spiritual seeing, where the individual changes to a new and more enlightened perspective on something. But the task of expressing these insights-of-discovery to others involves returning to production-oriented creativity in order to share the insights that have been gained. This insight means that any sharing of creative self-expression must involve a 'product' or 'performance' in the case of oral communication or physical demonstration.

Everything we do is conditioned by the way we perceive the world. So a key question is how does a teacher's perceptions and beliefs about creativity influence their pedagogies for encouraging and supporting students' creative development? It would be interesting to explore in the narratives of teachers' pedagogic practice how perceptions of creativity influence the form of learning ecology they create.

Student perceptions of what encourages and enables their creativity

How do students experience a pedagogy that aims to encourage and enable them to use and develop their creativity?

It is all too easy to get carried away with abstract ideas about how teaching practices work and ignore how students experience the ecologies they encounter while immersed in their higher education experience. In this inquiry we want to involve students and recent graduates in the conversation to try to gain their perspectives on questions like:

- How important do they think it is for students to be able to use and develop their creativity while they are studying in higher education?
- What aspects of their higher education experience encouraged and enabled them to use their creativity?
- Are some teachers better than others at encouraging and enabling them to use their creativity?
- What do these teachers do or say that encouraged and enabled them to be creative?
- How was their creativity recognized and valued?
- How might their teachers have provided more opportunity for them to use and develop their creativity?

And then there is the small matter of assessing for creativity

Assessing learning is an important element of a teacher's pedagogic practice and often it is this aspect of practice that poses the greatest challenge. While many teachers believe that it is possible to help students use their creative abilities to better effect, far fewer think it is possible to assess these capabilities reliably and even fewer are prepared to try and do it. Yet self-evaluation is critical to the very idea of creativity and peer-evaluation is crucial to the acceptance of creative ideas and solutions in a work context or field of practice. In an educational environment the recognition of a creativity is essential if learners are to believe that it is valued.

The views of higher education teachers on whether creativity can be assessed fall into four camps[43]. Some teachers believe that students' creativity is evaluated through explicit assessment criteria. A second group believe that insufficient attention is given to recognising students' creativity and that at best the evaluation and recognition is implicit. The third group believe that is not possible and/or desirable to assess creativity. While teachers in the fourth group value creativity but don't know how to assess it. Looking at this optimistically I interpret this to mean that most teachers, with appropriate support, guidance and cultural encouragement, could and would assess creativity in students' higher education learning. One thing is clear; a majority of teachers also believe that assessment is a major inhibitor of students' creativity.

Outcomes based assessment that assumes that all learning can be predicted and that the teacher is the only person who can define what the outcomes should be, is antithetic to learning that emerges in unpredictable ways – such as is produced through creative processes that pursue a sense of direction rather than a preordained pattern and match to specific criteria. This barrier can only be overcome if learners become partners in the assessment process. The metaphor of *catching the light* through a reflective process might be appropriate for catching creativity which requires people to be conscious of their own means of engaging with complex challenges and learning to produce novel solutions, products, performances or other outcomes. Emerging from numerous inquiries is a view that the primary role of the teacher is not to define creativity for students and assess them against their criteria. Rather, it is to help students recognise and understand their own creativity and help them express and make claims for it against evidence they feel is appropriate.

So what sort of pedagogic practice would give meaning to this role? Borrowing from practice in the architects' studio, Cowan[44] describes a collaborative teaching and learning *ecology* in which development of personal under-standings of creativity, *in a particular educational context,* the criteria through which it might be evaluated, and the process of making claims and judgements, is grown by all participants (teacher and students together) through the learning processes. Working backwards, the results of creative thinking and action are embodied in a self-, peer- and teacher assessed portfolios, with heavy emphasis on self-assessment and formative-assessment as the work and learning associated with it unfold.

How does assessment feature in pedagogic practices that aim to encourage and enable students to use their creativity? How do the results of assessment feed into developing pedagogic thinking?

Final remarks

This background paper attempts to provide a range of perspectives on teachers' pedagogic practices and on learning ecologies and show how the two ideas might be connected and integrated. To those encountering the idea for the first time it might appear novel idea but if it has no value and is not seen as being useful and relevant to practice then the idea will not be incorporated into thinking and practice. So the #creativeHE discursive process and the longer project being facilitated by Creative Academic is to test the usefulness of these ideas and were appropriate develop them further.

I shared a draft of my article with my friend and mentor John Cowan and true to form I duly received his provocative and critical comments which made me think again about how I was introducing the idea. But he concluded with an important question.

Is creativity best served when the pedagogy such as it is, is vested in the creative learners themselves, rather than in their teachers?

In other words, when teachers more or less get out of the way! This brings us neatly back to where we started by reframing the proposition, 'how do teachers' pedagogic practices enable learners to create their own ecologies for self-determined, self-motivated and self-regulated learning to achieve what they value: what might be termed a heutagogical[4] approach to learning?

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19.10.2016

In this section we are publishing articles that were created through the #creativeHE on-line discussion which took place in early November 2016

Introduction to the #creativeHE Conversation November 2016: Exploring Creative Pedagogies and Learning Ecologies
Norman Jackson

Affordance for Social learning

The #creativeHE Google+ platform[1], established by Chrissi Nerantzi , provides a wonderful example of the power and value of social media for social learning. #creativeHE is an openly licensed course and discursive space that extends opportunities for creative engagement beyond the physical classroom into more distributed spaces and places across the globe to connect individuals and groups to explore concepts of creativity in cross-disciplinary, cross-institutional and cross-cultural settings. Over 320 people have now joined this Google+ community: 70 during the course of the most recent conversation.

There are two types of #creativeHE event. The first takes the form of a 'course': a structured or scaffolded experience containing activities for learning and discussions typically sustained over 5 or 6 weeks. CAM4[2] documented one such course and some of the learning that was gained by participants. The second type of event is formed around a theme that is offered for open discussion. CAM5[3] documented an example of this type of event and CAM7 is also going to curate some of the conversation from our exploring creative pedagogies and learning ecologies discursive event which explored how teachers' pedagogic practices result in different forms of ecology for learning and creativity.

Structure

This discussion was organised over 6 days although a small number of people carried the discussion on after it had officially finished. A rough plan for the discussion was posted on the Creative Academic website http://www.creativeacademic.uk/creativehe.html together with

#creativeHE
A conversational platform for exploring creativity in higher education
https://plus.google.com/communities/110898703741307769041

Exploring Creative Pedagogies & Learning Ecologies

An unfolding conversation from Sunday Oct 30th to Friday Nov 4th 2016
Facilitated by Norman Jackson with help from my friends Chrissi, Jenny, Simon, Sue, Sandra, Erica, Kate, Roger, Paul & John

In this #creativeHE conversation we want to consider the value of an ecological perspective on pedagogy. Specifically, we are interested in exploring how a teachers' pedagogic practices can lead to the creation of ecologies within which learners can use, develop and recognise their creativity

a background paper[4] containing ideas for discussion. Nine people volunteered to help facilitate discussion and about 40 people contributed to it.

To test the learning ecologies idea we invited participants to prepare and share a pedagogic narrative of an experience in which they have either created a learning situation within which learners could use and develop their creativity, or they had experienced a situation as a learner where they were able to use their creativity. Authors were encouraged to evaluate their pedagogic narratives using the learning ecology framework provided in the background paper. In this way we hoped to test and develop the idea of a pedagogy for creative learning ecologies. A selection of pedagogical narratives are provided as articles in the magazine together with a synthesis of some of the most interesting ideas emerging from the conversation.

During the conversation we drew on three readings in addition to the background paper. The first, by Erica McWilliam, introduced the idea of pedagogic orientations - 'sage on the stage', 'guide on the side' and 'meddler in the middle'[5] and a number of contributions drew on the ideas. The second article by Catherine Dunton, provided an excellent reflective pedagogic narrative based on work she is involved in at Kings College London[6]

We also tried to gain students' perspectives in the discussion and we benefited greatly from the comments of a number who contributed to the process. It was particularly delightful to read their responses to the challenge of providing an alternative ending to The Little Boy story, which captured many important insights on the teacher's role in enabling learners creativity to flourish[7] and also demonstrated wonderfully their own creative talents.

Acknowledgements

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Collaborative Learning Ecologies: A novel pedagogy for fostering creativity across disciplines

Catherine Dunton

Kate is an art historian by training. She undertook doctoral and post-doctoral research and taught at the University of Essex before moving into an education development role, first at Brunel University then at the University of Essex. She joined King's in January 2015 as Research & Education Manager, brokering and supporting collaborations between King's and the arts and cultural sector. In this role, Kate has been able to pursue her commitment to creativity in Higher Education and develop her interests more specifically in arts-based learning across the disciplines, participatory research in a cultural collaborative context and the relationship between research and creative practice.

A reflective dialogue with two resident craft-makers on their experience of working with science students at King's College London
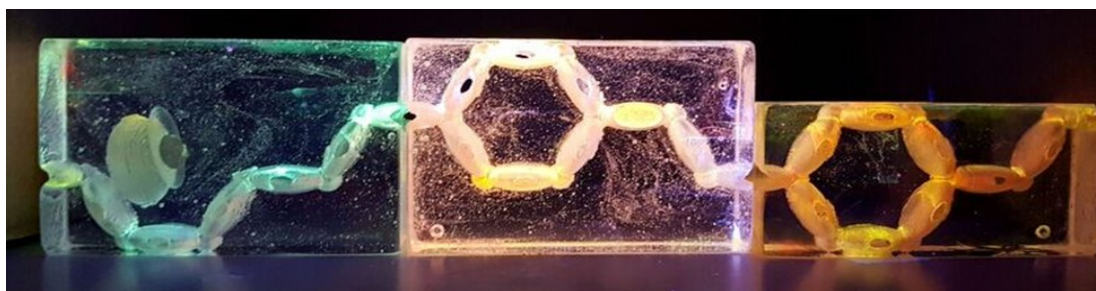
Quantum dots in glass, Struan Bourke (PhD student at King's College London) and Shelley James, Artist

Introduction

In autumn 2014, the Cultural Institute at King's College London in collaboration with the Crafts Council[1] launched *Parallel Practices*, an initiative which matched King's academics with resident craft-makers with the aim of fostering innovations in practice on both sides. Following the success of this pilot, a second phase of *Parallel Practices* was devised, this time with the focus primarily on student learning http://www.craftscouncil.org.uk/what-we-do/parallel-practices.

Dr Matthew Howard, a Lecturer in Informatics at King's who had taken part in the first phase of the Parallel Practices project, and his colleague, Dr Riccardo Sapienza, a Lecturer in Physics, were excited by the possibility of installing resident craft-makers in the Wheatstone Innovation Laboratory – a newly created maker space which they had filled with various tools and instruments including a 3D printer and a sewing machine. The idea was to create a vibrant, student-owned space outside the formal curriculum where students from the Faculty of Natural and Mathematical Sciences could experiment and play alongside peers in different departments and at different levels of study. The lab was named after Sir Charles Wheatstone, a Professor of Experimental Philosophy at King's in the Victorian Era. According to archival accounts, Wheatstone, a scientist and inventor known for his work in early telecommunications, was constantly making new devices and instruments. By embedding artistic makers with skills in traditional crafts, Matthew and Riccardo sought to recapture Wheatstone's creative and inventive spirit, giving their students the confidence to experiment and learn by making, as well as the opportunity to learn new skills that would otherwise be inaccessible to them in the formal teaching of traditional science and engineering disciplines.

Through a careful selection process overseen by the Crafts Council and the Cultural Institute at King's, two makers were appointed: John Grayson, who specialises in metalwork and automata, and Shelley James, who works in glass. Unusually, this residency blended two models; combining a workshop approach, where the makers would directly engage students in structured activities that might broadly support their subject-based learning, with a more traditional residency where the makers pursued their own work in the space thus allowing for more open-ended and curiosity-driven conversations and activities to emerge. As will be seen in the dialogue below, it was this reciprocal need for both the students and the makers to take something from the encounter, and the process of making and experimentation that lay at the heart of their shared inquiries, that provided the impetus for creativity and learning on both sides.

For John Grayson, the basis of his Parallel Practices residency was the Collaborative Automata Project. This explored the shared histories for the fields of Science and Art in 18th Century automata. During the project, some twenty students and staff collaborated on the making of a part-analogue part-digital automaton in celebration of Sir Charles Wheatstone in whose laboratory they were working. The automaton provided a vehicle for knowledge exchange. As John passed on his 'distinctly analogue' craft skills to students through a series of workshops, they, in return, 'enlightened' him, to the world of robotics. Three distinct phases occurred. The first two, led by John, focused on the micro engineering of metal mechanisms followed by the creation of enamelled decoration for the object. It was then decided that the finished automaton would be 'hidden' amongst a display of Wheatstone's scientific apparatus on display in the main corridor of the King's Building at the university's Strand campus. Thus, in the third phase, John's co-collaborators took over, applying their robotics knowledge to find innovative technological solutions that would enable audiences to interact with the artefact once it was trapped behind the glass of the showcase. MSc students devised a motion sensor system that would detect people passing by in the corridor, bringing part of the automaton to life. A PhD student then devised a 'mime handle', an ingenious amalgam of hard and software that would allow the viewer to mimic the turning of a handle (the traditional method of powering an automaton), thus bringing the rest of the machine, in John's words, 'into a joyous blur of movement!' This would also serve to attract the attention of passers-by to the content of the case, generating awareness of this important display of Wheatstone's instruments.

Shelley began the residency with a series of basic technical workshops that allowed her to gauge the level and focus of student interest. As students began to suggest new approaches and ask difficult questions, a common approach to research emerged, as well as a shared fascination with light. As Shelley and the students looked for ways to share this common ground, Shelley began to experiment with the 3d printer, discovering that she could use 3d printed objects to cast perfectly accurate casts in optical glass. Together, Shelley and the students built hyperuniform patterns, 'whispering gallery' structures and models of light-emitting materials that can trap, direct and even amplify light. In Shelley's words, 'this digital innovation quite literally allowed us to shine a new light on the structures of the future'.

Both projects led to a number of unexpected outputs, including student-led public talks as part of the Utopia season running across King's, Somerset House and the Courtauld Institute, and an invitation to the makers, academics and students involved in the project to part-recreate the residency at the Digital Design Weekend held at the V&A in September 2016.

For the Co-Managers of this project, Tiffany Radmore from the Crafts Council and Kate Dunton from the Cultural Institute at King's, it was particularly exciting to observe the innovative approaches to student learning and engagement that were developing. Articulating the value of these approaches was less easy, however, not least because the initiative operated in an unusual learning space that sat somewhere between the formal and informal curriculum, between the arts and the sciences, between the academic and the public spheres, and that brought together students at all stages of study from first-year undergraduate to doctoral researchers.

In the conversation below, Kate Dunton talks to makers Shelley James and John Grayson about their experiences with King's students in the Wheatstone Innovation Lab, using reflective dialogue as a means to tease out how they engaged

FIGURE 1 *The Collaborative Automata project, showing the students and staff who made, created and decorated the different components as part of the Parallel Practices initiative. Image by John Grayson.*

with students in order to foster creative experimentation, and what we might learn from this about approaches to designing and animating ecologies for learning for creativity in Higher Education more generally.
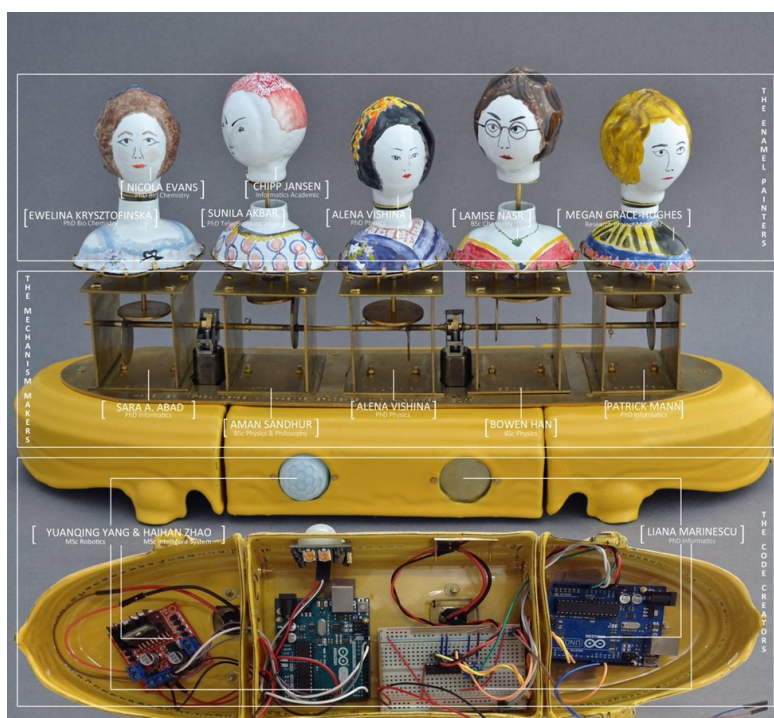
Reflective Dialogue

Interviewer:
Kate Dunton, Research and Education Manager, the Cultural Institute at King's.
Interviewees:
Shelley James, Glass Artist
John Grayson, Metal Smith and Automata Maker.

Kate's Preamble The official approach to learning design in higher education in the UK is predominantly out-comes based – 'at the end of this programme the student will be able to...' This project didn't start off like that. We knew that we wanted the craft makers to be physically present in the Wheatstone Lab, and in some way to enrich or animate that space for students in a way that was in line with the ethos of the lab, that is to say, as a space outside the formal curriculum where students could come to play and experiment and tinker. Other than that, it was a blank slate. At the same time, the kind of interactions that might arise between the makers, the academics and the students wasn't left to chance. There was a lot of discussion and reflection all the way through the collaborative process. In this conversation, I'd like to try and tease out how that balance between structured support and experimental play was negotiated in the planning process.

Q If we can begin by going back to the earliest phases of the project - what were the unknowns at that stage for you?

John: Obviously, the environment in the maker lab was quite different to anywhere that I had worked before. Matthew (Howard, Lecturer in Informatics) and I were trying to come up with project ideas that were clear in our own minds and share those with each other but we were coming at it from different sides of the fence; we couldn't see into each other's world. Essential to the collaboration was the realisation that I could see what Matthew and Riccardo (Sapienza, Lecturer in Physics) wanted but I needed to get something out of it for myself: it needed to be a knowledge exchange. So those first two or three weeks were a case of going along with ideas – working with enamel, or with card to make low-tech automata, for example – and evaluating them in terms of what the students would get out of it, what I would get out of it, and then redesigning the scheme; keeping the things that worked, dropping those that didn't.

Shelley: Yes. That was the interesting thing for me, to try and find a way to develop short, single-session mod-ules that the students would enjoy and find rewarding and could slot into their day and wouldn't be pointless from an academic or intellectual point of view. From my initial conversations with Riccardo, I was very aware of the different levels of skills and dexterity that the students have. As kids, we're told that glass is scary, danger-ous and expensive so most people are a bit nervous – they have never actually worked with it, unlike clay or wood. I spent the first couple of weeks just watching and listening. I realised that, as Riccardo had already said, the students are quite sophisticated in their ideas. So the idea was to find things that would be difficult enough yet accessible, and also relevant to what they were doing.
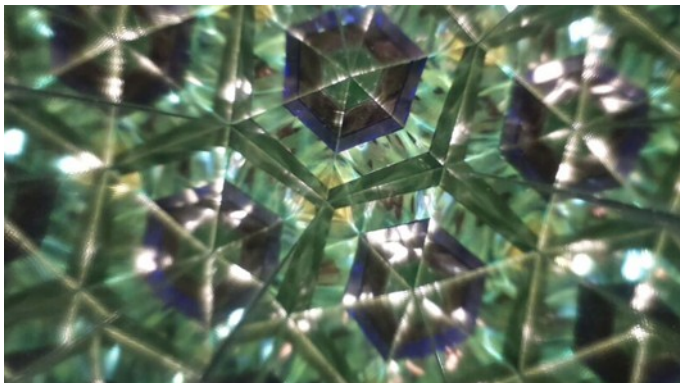

Figure 2 Kaleidscope made by a physics student

What we do as makers is not only decorative; it can be seen as a powerful and radical activity. Many of the great scientists, including Charles Wheatstone himself, were instrument-makers. They believed that the tools that we have define what we can see and often built their own. That's why I came up with the idea of making kaleidoscopes because it involves symmetry and maths and dexterity as well as a degree of personal design. I showed students some simple techniques for fusing and blowing glass. Because the glass changes colour and shape as it gets hot, we started talking about light and thermal expansion. The students seemed to find the activities stimulating and often stayed long after the time that they had booked. But, I wasn't just there as a workshop teacher. I wanted something that was enriching for my own practice. Like John said, it was out of the need to find that balance between the students' needs and mine that ideas emerged: students started to suggest other things that I could try.

John: It's opened up so many opportunities for all involved. Some of the students started to really immerse themselves. I think it gave them a good opportunity to see how they could apply their skills in a slightly wider context, and in a risk-free way. Because it's not tied to a module they're not petrified about failing. It was a supporting environment. They knew that we were there to ensure that what they were making didn't end up being tat. At the same time, it allowed them to challenge themselves a bit.

Shelley: They found themselves using things they had learned in lectures and, through that, they discovered that engaging with these kinds of making activities challenged their own understandings and fears and also allowed them to share that with other people. There are different levels of connecting with this form of learning. Some students came along and just enjoyed the experience as a break from their revision, others engaged more deeply. Some of the students came to my studio and played around with some things there. I'm not sure if you could measure that; the value of having someone to talk to about materials in general and more specific questions like how to cut a straight line in glass or how to fuse glass beads together. We talked a lot about the sheer pleasure of doing something as well as you possibly can. It was interesting to see the different approaches to perfection and precision.

John: Manual skills are really important. There are many articles in design magazines on how, in this digital age, people's lack of understanding about materiality means that when they work with software such as CAD they make basic mistakes.[1] The machine is cutting something but if you don't understand the properties of different materials you pick materials that are inappropriate for that process. People are starting to realise that even in a technologically advanced world, hand making skills, craft skills, art skills, are still really important.

Figure 3 Comic strip made for the project by John Grayson

Shelley: Several of Riccardo's students had been playing with materials and when these got hot they began to expand and soften and change shape. So understanding materials has a direct relevance to how they design an experiment. I think it would have been interesting from the beginning to work out which skills I might offer them that would be directly constructive for their experiments, something that might be relaxing and intellectually diverting but also relating directly to their studies.

Kate: I'd like to focus in a little more detail on the decision-making processes that you were going through as the project progressed. How were you deciding what to drop, what to continue, what to do next?

Shelley: There are different things I do to relax my brain to the point where something interesting pops up. I might go swimming and as I'm doing the breaststroke, I'm thinking: "How the heck am I going to do that?" I also spend time just hanging around with an open mind. For example, I sat in the common room with my sketchbook. As I tried to work out what to offer these potential friends I imagined a couple of them and thought about how what I was going to offer might work for them. I also tried these activities several times myself, thinking about how much time they might take, levels of difficulty for different learners. I feel that if students are taking the risk to come, I want to make sure that that there is the optimum chance that they will find it rewarding.

Kate: Does anything get written down at this stage – notes or drawings?

Shelley: I have a book in which I write notes and draw little mind maps. I also have a bunch of sketches and models that I make; examples of experiments. So yes, there's a physical experimentation. Also, there was one student who was quite sophisticated and I would try things out on him. If he found it difficult, I knew it was going to be beyond most of the students I was working with. I invited some of the students to my studio so that they could see what I was trying to achieve and the tools that I had at my disposal; a kind of shared vulnerability, I suppose, "This is what I can do and I've never done this before." In the one-to-one projects with the postgraduate students, where there was a more sustained relationship, I could take more risks. But I still made sure that every interaction was properly structured and well thought through and projected. It was an incubated collaboration.

Kate: That's an interesting phrase, 'an incubated collaboration'. So it's carefully thought through but it's not fixed in advance.

Shelley: Absolutely. There's an envelope but it's an open envelope so the students can pop stuff into it as well. For example, I noticed that the bottles that they keep their amazing nanoparticle samples in are really ugly, so I showed them how to heat up and blow standard glass pipettes to make little vials. We put some of their nanoparticles in and then one of the research students said, "Why don't you make it longer, like fishing floats, and we'll put them in water…" And we all zoomed down to their labs in the basement where there were all sorts of big glass cylinders. I had no idea that space even existed. One of them ran off to get blue light torches and they were all so excited by the way the colour looked different when looking from underneath through the water, or from the top. As the 'tails' full of liquid crossed in front of each other, we could see new colour combinations. If I'd suggested it, it wouldn't have had the same spontaneity.

One of the students then wondered what would happen if we looked at the colour through thicker pieces of glass. We mixed their dyes and nano-particles with a special glue and used that to assemble pieces of glass. Again, the colour looked different depending on the angle of view and we've started to build some more complicated models together using these effects.

So it was important to leave space for the students to bring their own ideas. I suppose I incubated a situation that was still open.
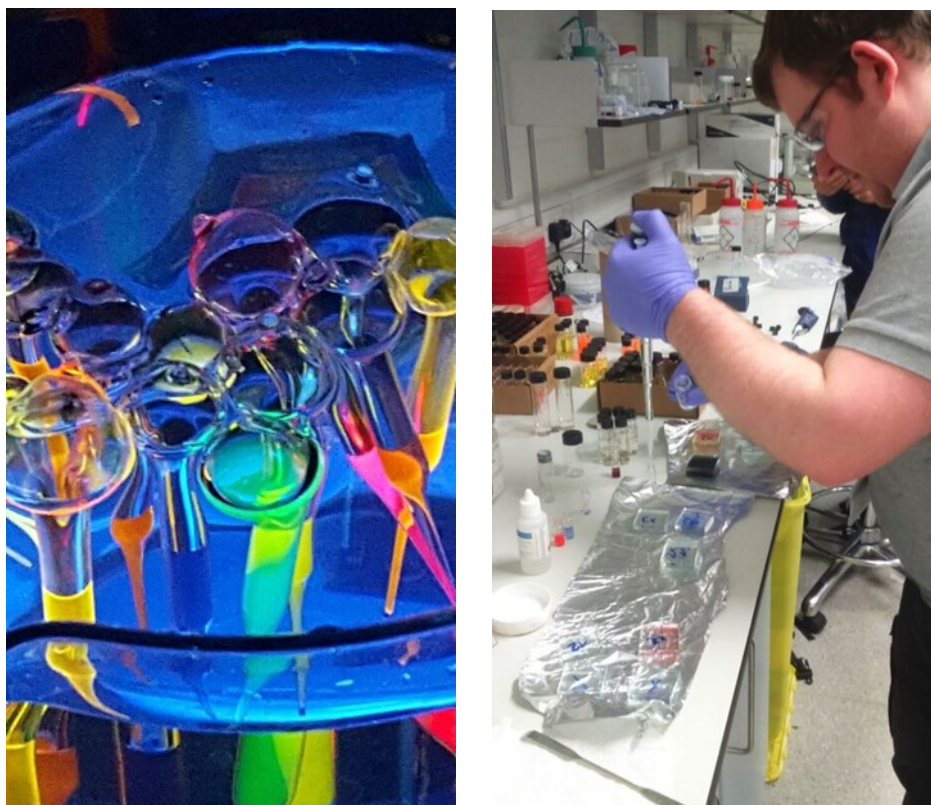

*Figure 4 Left: Quantum dots in vials blown from test tubes by students floating in water **Right:** PhD student Struan Bourke experimenting with glue and glass in his lab.*

John: The nice thing with this project is that it's not part of assessed learning against a module descriptor with a predetermined set of learning outcomes. And of course, that introduces an element of risk because it could turn out to be completely rubbish.

Shelley: And a waste of the students' time.

John: You could argue that not identifying outcomes at the beginning is a problem because you can't measure if you've met them. But equally, risk generates innovation. There will always be 'known unknowns', that is to say, the things that we know are going to happen because that's the nature of the project, but we don't know what they are exactly and we let them unfold. We can do that because it's not tied into a set of learning outcomes. We can extend those vials into long pipettes and chuck them in a bucket of water just to see what happens. In a formal module, where that might not serve the learning outcomes, those moments of spontaneity would be lost.

Shelley: I suppose it's how you define an outcome. For example, I noticed that the students kept the things they made on their desks. I think that's an outcome.

John: Yes, it is. I suppose what I'm saying is that the outcomes are much more fluid. For example, if you started with an outcome that was about developing new technology – lasers, for example – and then through the act of play it starts going in a different direction, somewhere amazing, you might feel you have to reign it in. That to me seems to defeat the whole point of doing something experimental.

Shelley: I think we can work with fluid outcomes because we're both quite experienced as makers and have done quite a lot of teaching in different settings. Also, there was the skill of the Crafts Council and the Cultural Institute in selecting and matching makers and academics who were going to get value and give value through the project.

Kate: If there is an alternative kind of learning that is not outcomes-based, how might we define that?

Shelley: You might need to call it a 'development'. People are changed in some way. It's something to do with the way they understand their own fields, their sense of their own potential, of themselves as human beings, of learning how to interpret the behaviour of the material they work with. It's about recognising that it's a journey, it's a process, rather than an outcome. I don't know if you feel the same way, John?

John: I think with a project like this, the students start to develop an understanding about the relevance of whatever they do within a much broader context. For undergraduates, in particular, it makes them realise that there is more to their learning than just soaking up knowledge and then being able to repeat that knowledge in a formal exam, or apply a bit of lateral thinking in a personal scientific project. They are starting to see that when they go out into the world, developing robotics for the medical industry, for example, they will be interfacing with designers, industrial engineers; a whole host of other people. Also their work will have an effect on medical staff, patients, and so on. They start to see that their work is one element in a bigger picture.

My dad used to race bikes when he was in his late teens and early twenties. He used to tell me about the man who made his bike, one of the best frame builders in the country. Later, this chap went into the medical industry and made cutting-edge prosthetic limbs. I suppose what I'm saying is that there are a lot of things that go on in other fields that you wouldn't think had any relevance. This kind of project opens that door a little bit. A student might realise the relevance in glass or automata making. It might make them more inclined to go out and look at what's going on outside their field and pick up on a technological innovation or a bit of lateral thinking they might otherwise have missed.

Source: http://www.mtb-amputee.com/images/IMG-0195.jpg
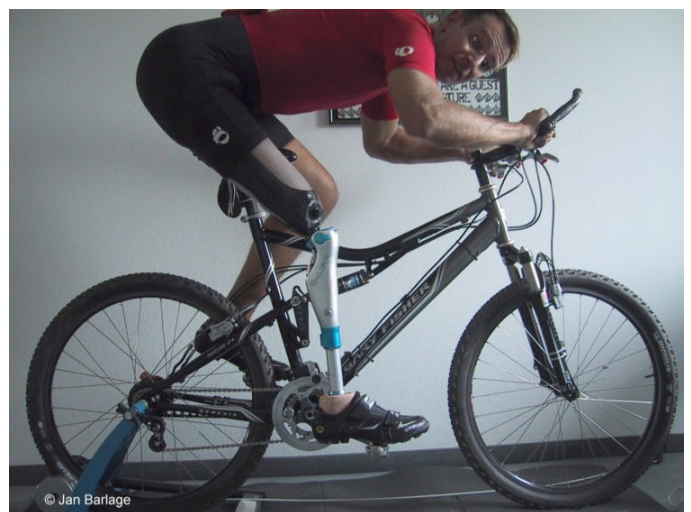
Kate: In the context of this project, to what extent did that process of engaging with a related activity outside of their normal sphere impact on the students? Did you observe any shifts in their thinking, any light-bulb moments?

Shelley: Yes. On a number of occasions. One student wanted to make waves by fusing glass spheres together. That idea came because he had come to a fusing workshop. Having access to a new technique unlocked something for him about a problem that he hadn't even articulated as a problem; something to do with the expansion coefficient. If he hadn't actually had the personal experience of getting glass hot in a kiln and seeing it run around like cheese on toast, he wouldn't have realised what he was trying to do. Another student wanted to make some pipettes. He thought he needed a bend in the pipette because that's how it is in all the literature, but in fact if you put the pipette in at a right angle you don't need the bend and it's much easier. For that student it was a realisation that it's possible to make your own equipment that will work for that specific experiment. In another instance, the students had been looking at how they could use the way that nanoparticles change colour under UV light for medical applications – they needed to get these molecules to zoom around in the body so they can be tracked. As I mentioned earlier, when we looked at these molecules through glass, we could see a kind of glow which could be created by electron clouds. The PhD student that I was working with hadn't *seen* it happen before in that way. So he was able to see – and explain – how the shape of these molecules affect the way they respond to light and why what he is doing is so revolutionary. So those were some of the light bulb moments where students worked in a slightly different way.

http://www.clipartkid.com/ images/32/bright-idea-clipart-

Kate: These examples, I'm guessing, come from the one-to-one collaborations with the PhD students. What about the undergraduate students?

Shelley: The post-graduates are wrestling with an issue and trying to find an original way through a topic whereas the undergraduates aren't yet at that stage in their way of thinking. They seemed to engage in a more personal way – lots of them talked about their experience of doing art at school.

John: We did engage in a more sustained way with the undergraduates who were doing their project work, but because of the timing of our residency they were already some way through. I would like to have worked with them at the beginning. You could see that some of the student groups had spent hours making something but it wasn't well-made and so it didn't work in the way they wanted it to. I think it could work well to offer students at the start of their projects one-to-ones with makers. That way, the students would come to you with ideas about what they're trying to achieve. And particularly if it was endorsed by Riccardo and Matthew - the endorsement of the academics is really important. When it comes to the undergraduates, the people who would benefit most from this sort of project are probably those who are least likely to self-select. Those that are prepared to come along and engage with the makers already have an open mind. Building it into their project work might be the best way to allow them to stumble across the benefits of making whilst avoiding that sense that they're only doing it because they've been told to.

Kate: Throughout this conversation, we've been talking about the approach to learning design that evolved in this project, but I wonder, is 'design' a term that you would use? Do you think of yourself as 'designing' learning?

John: Yes, I would say so. Processes can be designed as much as objects and products. In the case of this project, we were using prior knowledge plus the information we were given when we first arrived. In that first week or so we were just seeing what was going on and then re-evaluating. And there are parameters that you have to work around; the timescale of the project, the budget, and, in my case, what amount of kit I can carry on the train. Then I was road-testing things. So, you're very much designing the optimum way forward and getting the best experience for the students and for yourself.

Shelley: It's a sort of devising. There's an improvisational dimension as well based on who the students are. That's why it's been so good not to have to work towards a learning outcome. It's more to do with offering an attitude and a set of activities, rather than saying, "You will know about quantum dots in glass by the end of this." Which, in fact, I had no idea they would.

Kate: And is there a relationship between 'design' in the context of designing learning and 'design' in the context of your practice as makers?

John: I see it as the same thing.

Shelley: So do I. Totally.

John: In both contexts, you're basically working with stuff. In terms of my own work as a craft maker, the stuff is metal and enamel. I start with drawings and maquettes, thinking it through in my mind, then periods of trial and error and experimentation, then reflection on that, and then I apply that knowledge to evolving the design, and then make the thing. You do exactly the same thing in the education context; it's just that the stuff is the student experience. But it's still a physical thing.

Figure 5 From John Grayson's notebook
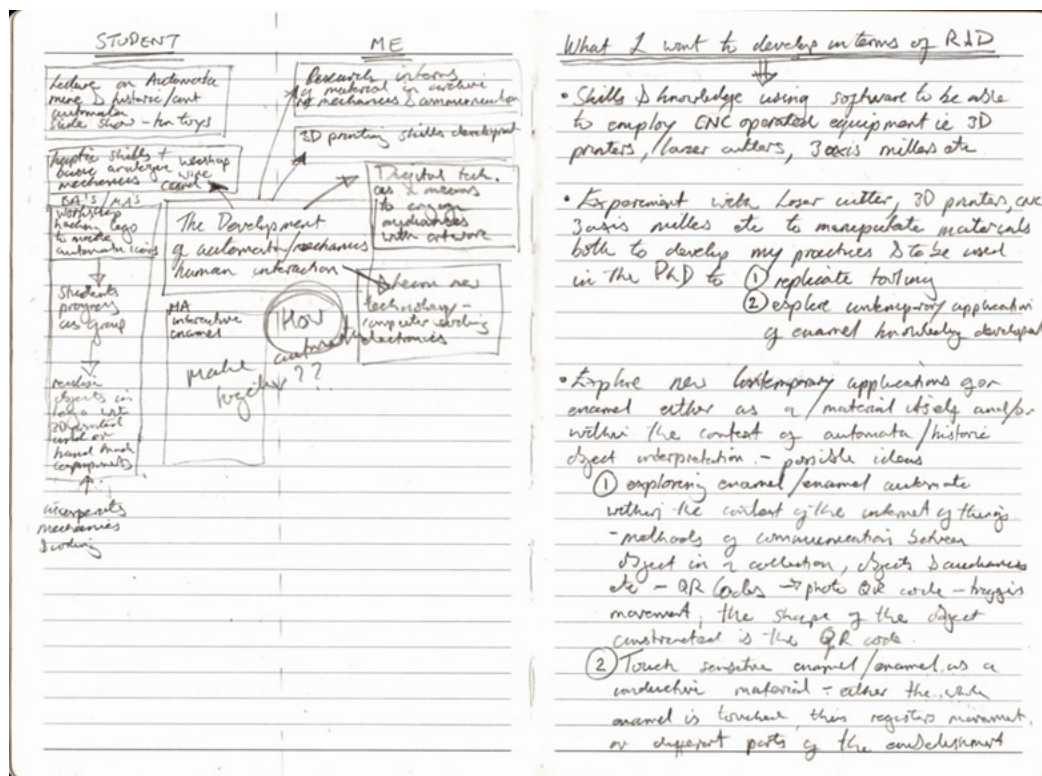
Shelley: It is, and conversely, when working with materials, it's still a conversation   because I might have an idea of what I'd like the glass to do, but it's like a human being in that you need to listen and respond and be respectful. So that's why there's a kind of improvisation and devising dimension to it, which is to do with think-ing on your feet and being responsive and sensitive at the same time. So yes, I agree with John, they are exactly the same thing except that the materials we're working with in the education context are relationships and in-sights as opposed to pieces of glass. I also think both my work and John's is site-specific. The work we've been doing with students at King's is also site-specific in that we're responding to a given space, a given situation.

Kate: Is there anything we can learn from this project about the formal curriculum and how we teach it – institutional strictures aside?

John: I think it would be really interesting if there was a module in every year that had nothing in it; no content, no learning outcomes, just a slot of time, a space, and some money for the staff to do something truly ground breaking. And if it all goes pear-shaped, no-one is going to get canned.

As a course manager, you go through a validation process with reams of paperwork. You're hoping the course will stay relevant for three years or so because you really don't want to have to go through the approval process again. Of course, these processes are about making sure that programmes are robust, but there are times when you want the opportunity to go with whatever is current and that might not have been there two years ago when you designed the course.

Shelley: Also, I noticed that with a few of your students, John, this project really gave them a sense of shaping their learning for themselves. I saw them really grow into defining the agenda. So this blank module might also be an opportunity for students to shape what is being taught and who is teaching it. That would be incredibly rewarding and empowering for them. And we all learn better when there is something new to get to grips with. In this project, I've been impressed by the dedication and insight of the academic staff. They

> I think it would be really interesting if there was a module in every year that had nothing in it; no content, no learning outcomes, just a slot of time, a space, and some money for the staff to do something truly ground breaking. And if it all goes pear-shaped, no-one is going to get canned. John Grayson

know their students well, and I see them frustrated by the inability to respond to what the students are really interested in and excited by.

The blank page approach would support these kinds of intuitive, interactive modes of learning or of development. If you wanted to bring in collaborative artists, that's where the role of the broker – people like you, Kate, and Tiff Radmore from the Crafts Council – comes in. You introduce academics to artists who are vetted through the application process, and through networks of known practitioners, so the academics know they are dealing with a reliable, committed and safe pairs of hands. A department might build up a pool of practitioners who could be brought in for projects like this.

John: I think this could also work in reverse in terms of art education. Many art schools are now engaging with a whole range of really interesting ideas and approaches from the realms of science and technology but I've not heard of anyone inviting a nono-partical physicist to come and set up their lab in an art school. It's usually artists dabbling with technology for themselves. That would also give you a comparative project to evaluate against; you could see if there are common responses in the way that the students learned in both environments.

Shelley: I've realised, talking to the students as part of this project, that for many of them it turned on the head of a pin whether they chose to study arts or science or music.

John: A lot of them are multi-talented

Shelley: Giving students a chance to be themselves in a variety of ways is really at the core of what this kind of project offers.

Figure 6 From John Grayson's sketchbook

My ecological perspective

This issue of Creative Academic Magazine explores how the pedagogies of teachers, and others involved in students' learning and development, might create ecologies within which teachers and students both learn and achieve. The idea of creative ecologies was introduced in CAM5[3] and reading Norman Jackson's framing article two ideas struck me as particularly relevant to the way in which students were supported to use and develop their creativity within the Parallel Practices project discussed above:

"People who are driven to be creative seek and find favourable environments to be creative in. They also modify existing environments in ways that enable them to realise their creativity and they also create entirely new environments (eg an ecology for learning) in which they and others can be creative. They are able to see the affordance in an environment they inhabit and use it to realise their creative potential."[4:5]

"A creative milieu or environment represents a certain potentiality that must be activated through human communication and interaction. What makes a location attractive is its possible or imagined advantages, not the realized ones."[5:2]

These perspectives describe very well the underlying ethos of our initiative. The space itself was crucial and was specifically designed to be somewhere that students might express their creativity. It embodied the ethos of the maker space; that is, a space to imagine, take risks, play, tinker, experiment and develop ideas that have personal meaning to the individual, making use of the abundant resources available and without fear of failure. This space, and the resources within it, provided what Jackson terms the 'affordances' for personal creativity but crucially participants had to recognize these affordances and be willing to act on them. Equally, the space needed to be animated by human communication and interaction, and that's where our makers and their academic partners were key. In the interview, Shelley talks of an 'incubated collaboration'. I think that chimes very much with the learning ecology idea, but importantly a learning ecology that is both created for students and within which the students are active in shaping and activating that ecology continually as key components of its survival. I am grateful to Norman Jackson for pointing out Erica McWilliam's idea of teachers as meddlers-in- the-middle[6] helping, enabling and challenging learners and themselves to create in ways that have personal meaning. Certainly, the way in which the craft makers modelled their own creative processes and behaviours, constructively disrupting the students usual expectations and approaches, offering a glimpse, as John pointed out, into a parallel world, was an important element in fostering this collaborative ecology for learning and creative achievement.

The way that the space brought together and connected students across departments and at different levels of study, removing some of the usual hierarchies, is also interesting from an 'ecological' perspective. It allowed and demanded the sharing of resources, including participants prior ideas and knowledge as well as those which were developed collaboratively through making and practical experimentation. Creativity was driven by the need for everyone to give something and to get something from their engagement with the milieu. This came out very strongly in Shelley and John's wonderful reflections – 'it was the drive to find a shared ground and reciprocal benefit that drove the creative encounter'. The idea of emergence was very strong in both narratives and the undeniable truth that our most creative ideas and achievements cannot be predetermined as a set of learning outcomes contains the fundamental wisdom of this story.

In a broader sense, the work we do at the Cultural Institute, drawing on the incredible richness of arts and culture in London to drive innovation in our research and education (and reciprocally inform innovation in the arts and cultural sector), is very much based on a relational, ecological model of partnership and interaction. Before I wrote this piece, however, I hadn't thought about creative pedagogies in terms of an ecological model, so it was interesting to draw on these emerging ideas when reflecting on the pedagogic value of the maker residencies. These are just some preliminary thoughts. It is a really interesting concept and one that I'm sure I'll continue to mull on in the context of our work at King's around arts based learning.

End Notes & References
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3 Exploring Creative Ecologies Creative Aademic Magazine 5 Available at:
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EXPLORING CREATIVE PEDAGOGIES AND LEARNING ECOLOGIES

Synthesis of the #creativeHE conversation

by Jenny Willis

How to synthesise and make static what is such a dynamic, multi-dimensional 'conversation'? That was my task and I did not under-estimate its difficulties, for in the space of 6 short days, exchanges spiraled into unexpected territory as participants shared their experiences, work, wisdom and links to additional source material. Perhaps this was the first thing to strike me: the generosity of those taking part and their profound desire to understand more about the creative process in education. This was so aptly captured in Simon Rae's image (right).

Reflecting this evolving process, the conversation is contributing to a novel and exploratory format for CAM7: each month, over the next year, new material will be added to the online magazine, creating an historical account of evolving conversations and ideas. My task of analysing the event was further complicated by the very interactive process: individuals come forward spontaneously, so the conversation is not neatly linear, delineated by day. Added to this is the revolving view of comments, which means that the screen is constantly changing. Each time I revisit the site, I discover something new that I had missed previously.

#creativeHE sharing experiences
co-creating new meaning

This synthesis cannot include all the wonderful contributions made to the conversation, so I would urge readers to visit the #creativeHE site and dip further into its riches. Here, I focus purely on the ideas exchanged, and try to give a fair representation of the community who joined in.
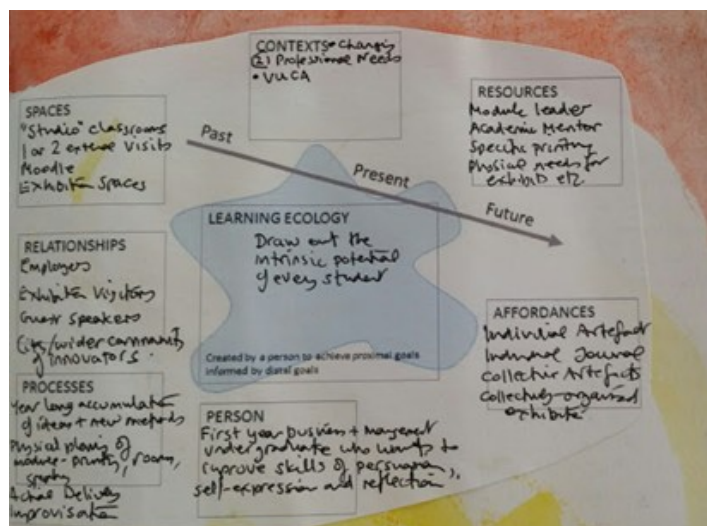
Day 1 EXPLORING CREATIVE PEDAGOGIES AND LEARNING ECOLOGIES MAKING A START DAY

Resource: http://www.creativeacademic.uk/creativehe.html

Each day was scaffolded around an issue supported with a stimulus resource. The first article was included in CAM7 (see also link above) and invited participants' views on the value and usefulness of an ecological perception of the pedagogical process. Such questions are rarely answered directly. Rather, people who are interested try to apply them to their own circumstances and develop understanding through this process. The examples below illustrate how two individuals worked with the template but adapted it in novel ways.

In the first, Clive Hotham explains:

I took Norman's very helpful diagram and converted to PPT (right). Then drew on it in my journal.

The second adaptation is by Ellie Hannon, who says:

For my learning ecology, I have selected a workshop that I ran in the summer as part of our festival of learning and teaching. It was a 2 hour session aimed at introducing colleagues to ways of using video in teaching. (…) I've attempted to use the creative ecologies framework to think about the elements at play in the session. I've highlight the bits that I think are the 'sites' of the creativity in the session. Let me know what you think!

Whilst this discussion was going on, a parallel conversation unfolded around issues that participants wanted to explore over the week. For example, there was a lengthy discussion of assessment and predetermined learning outcomes, launched by Paul Kleiman, which engaged numerous people and revealed strong feelings that creativity is constrained by such academic frameworks.

Day 2 PEDAGOGIC ORIENTATIONS & ECOLOGIES FOR LEARNING & CREATIVITY

Resources: Erica's McWilliam's article http://www.creativeacademic.uk/creativehe.html
Sam Grogan's blog post on 'meddling' https://systematisingserendipity.wordpress.com/2016/05/10/meddling-in-the-middle/

The question for day 2 focused on different pedagogical styles and how they impact on the types of ecologies for learning that teachers create. The reading was provided by Erica McWilliam who used the ideas of sage on the stage, meddler in the middle, guide on the side to describe different pedagogic orientations and participants were invited to share their own metaphors to describe the pedagogies they used to encourage students to be creative.

Some memorable phrases emerged in responses to the question. I particularly liked:

'Creativity is also a story' – Teryl Cartwirght

'Re-genring' – Sandra Sinfield

The meddler-free dictionary – Clive Holtham

'Buttinsky and Quidnunc are my favourite synonyms for 'meddler'' – Jonathan Purdy

'The 'subverter on the side'' – Jonathan Purdy

'…another metaphor, the one of "conductor", as a teacher who conducts the orchestra of students. They could play their own musical notes but they would work all together as a group in creating a new piece of music.' – Aikaterini Rousou

'The "meddler in the middle" can lead to "miracles" in a classroom!' – Alexandra Gkouzou

Day 3 SHARING PEDAGOGICAL NARRATIVES

Resource: Collaborative Learning Ecologies: A novel pedagogy for fostering creativity across disciplines Catherine Dunton http://www.creativeacademic.uk/creativehe.html

After reading the innovative pedagogic project described by Kate Dunton, participants were invited to share their own narrative of a pedagogical experience 'in which you have either created a learning situation within which your learners could use and develop their creativity, or you have experienced such a situation as a learner.' Selected narratives would be worked up for inclusion in a later edition of CAM7.

There was a lively and constructive exchange between our Greek participants on some principles of good practice. Froso Pashalido argued strongly that:

> *...creativity doesn't need complex projects and overdetailed designs. It only takes good will from both sides and teacher's investment and trust on students' innovative and out of the box thinking for a project to develop and creativity to happen.*

It was a popular view, summed up thus by Alexandra Gkouzou:

> *Indeed, from my point of view.... creativity is to make something from nothing!*

Kostas Batzilis continued the previous day's discussion and shared an intriguing comparison between 'traditional learning' (the left hand path) and an alternative, as illustrated (image to right).

> *The "free spirit" of the right-sided tags encourages and reinforces the creativity of the students. This can lead to a more effective learning.*

This sparked some interesting discussion around risk-taking and experimentation. In another strand, conversation turned on creativity using computers.
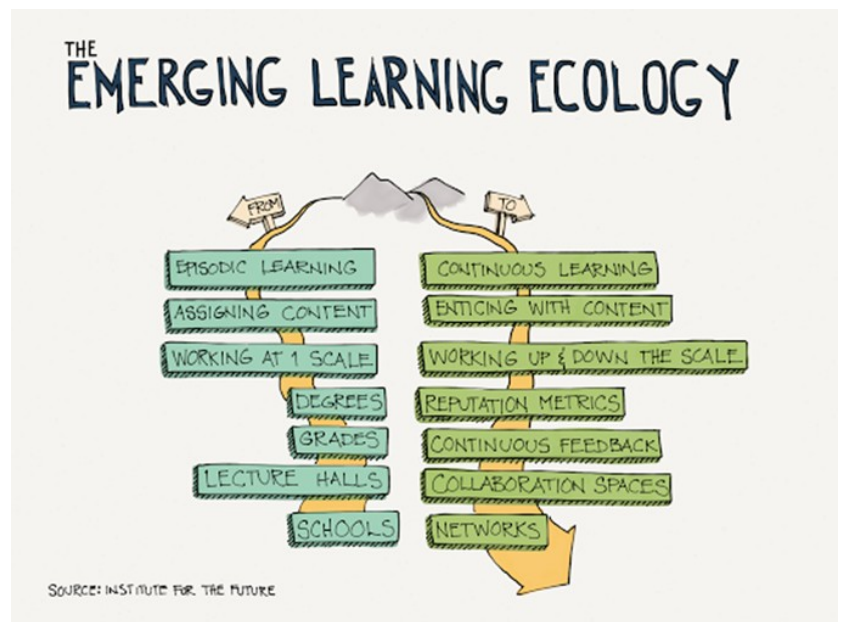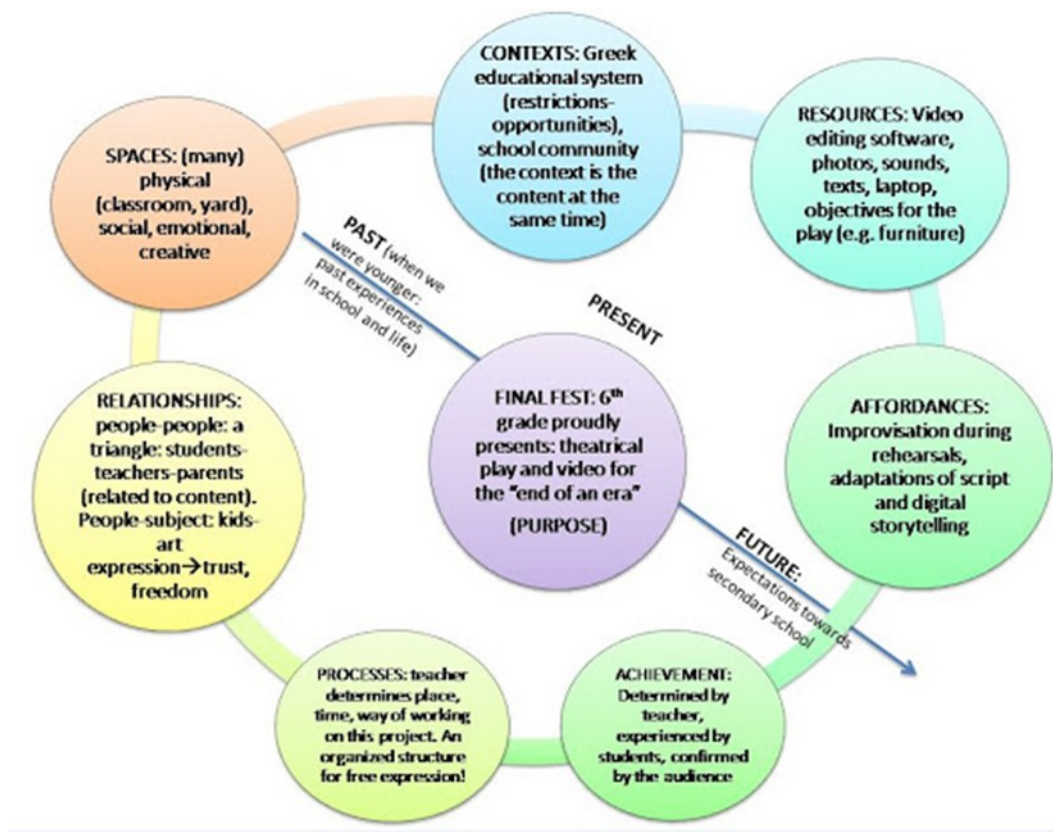

Norman found 'a star' in his 'constellation of participants' when Theodora Tziampazi shared the story of a project she developed:

> *Most students in my classroom wanted to participate in a theatrical play. Inspired by the life and atmosphere in the Greek educational system, I wrote a script for a theatrical play, titled "School Paranoia". It included themes and scenes familiar to everyone who is involved in education (teachers, students, parents) with a sense of humour and modern theatrical structure. The script became truly transformed during the rehearsals, when children and I came up with new punch lines and modifications to the plot.*
>
> *In addition, we created a video, a digital storytelling with photos and videos of the students, presenting their development through Primary School years and their thoughts about the next step (secondary school). It was a collection of memories and a mix of expectations, fears and hopes.*

She went on to translate this experience into a wonderful image that won widespread applause (shown on next page).

CONTEXTS: Greek educational system (restrictions-opportunities), school community (the context is the content at the same time)

SPACES: (many) physical (classroom, yard), social, emotional, creative

RESOURCES: Video editing software, photos, sounds, texts, laptop, objectives for the play (e.g. furniture)

PAST (when we were younger: past experiences in school and life)

PRESENT

RELATIONSHIPS: people-people: a triangle: students-teachers-parents (related to content). People-subject: kids-art expression→trust, freedom

FINAL FEST: 6th grade proudly presents: theatrical play and video for the "end of an era" (PURPOSE)

AFFORDANCES: Improvisation during rehearsals, adaptations of script and digital storytelling

FUTURE: Expectations towards secondary school

PROCESSES: teacher determines place, time, way of working on this project. An organized structure for free expression!

ACHIEVEMENT: Determined by teacher, experienced by students, confirmed by the audience

Vicky-Anneta Tsoulfaidou contributed her own story and illustrations:

I would like to share with you my experience as a undergraduate student of Preschool Education. In one particular lesson called "Puppet art and topics" we were assigned to make two puppets of our own. During the first lessons, the professor showed us various ways to make puppets(the head, arms, clothes), with a large variety of materials. This pedagogical technique seemed at first, kind of strange to most of us, but it aroused interest in the classroom. It seemed very creative, because we had the time and space to make whatever we wanted, using meterials of our choise and furthermore we had to name our puppets and infuse them with a name and a story.

She explained:

The creating of characters and stories helped me to decompress the stress and anxiety a nurse , faces everyday in operation room. It reminds me that life can be beautiful, besides sorrow and pain and we all should give the chance to ourselves to try something different, that can make us smile.

Dora Koutsou responded with:

Creativity is a critical component in enabling us to cope, find pleasure and use our imaginative and innovative powers. This is why we should learn through play and continue this vital pedagogy, despite any changes coming our way.

Day 4 SHARING PEDAGOGICAL NARRATIVES & STUDENT PERSPECTIVES

There were two tasks for this day: (1) to continue analysing personal narratives, and (2) to talk to some students or recent graduates during the course of the day and report back their comments, or invite them to contribute a post.

One of the issues that emerged was systemic constraints. Chrissi Nerantzi asked,

> Fred, you say the "system restricts" but we are the system? As you say many of us are just passive observers... but is this silence also a voice? What is our persona responsibility in making change happen, in changing "the system"?

Fred Garnett was sceptical of teachers in the UK, replying with an illustration:

> ... after working in government I took on a small project in a school in 2009 to help develop a "creative learning strategy" At the end of a year my conclusion was that the Governors couldn't govern, the managers couldn't manage and the teachers couldn't teach. Unsurprisingly the kids couldn't learn, although they said the only interesting things in the end of year review such as "if we could have 3(!) creative classes a year that would be good". So I think teachers in the English education system are very passive about system change to improve Teaching & Learning, let alone making that process creative...

Sandra Sinfield had already touched on this same issue when she explained how she was encouraging 're-genring' to escape perceived boundaries:

> We want our Education Studies students to 'see' education differently - but how - given that they are from and in an education system? We set them the task of exploring the university - and seeing what helped learning to happen - and what might get in the way... We said that we wanted them to explore ALL the university's spaces... and then to represent their findings as poetry, knitting, animation, video, short story, dance, 3D object, cabinet of curiosity - and then they put on an Exhibition. Fiona English talks of the power of re-genring - and we think that having students re-genre in this way - rather then in an essay - allowed them to really think about what **they** wanted to 'say' and represent - rather than as with the essay - worrying about getting it right ... Here I argue that creative practice was also empowering practice.

Taking up this more positive note, Paula Nottingham canvassed her students and posted a set of encouraging responses on how they felt creativity could be developed. She concluded:

> good to see how people are connecting with the philosophy of the course.

Paula described one technique she uses:

> I use drawing as a way to introduce reflection so use various automatic drawing techniques to bring out images rather than words. Many people have been 'taught' only representational drawing techniques, and not ones that allow free association to become part of the process. I like Rudolph Arnheim's work to introduce this and also use my own drawings to illustrate how drawing can be used to bring out reflective practice and critical thinking.

Adding a striking image, Alexandra Gkouzou reminds us that
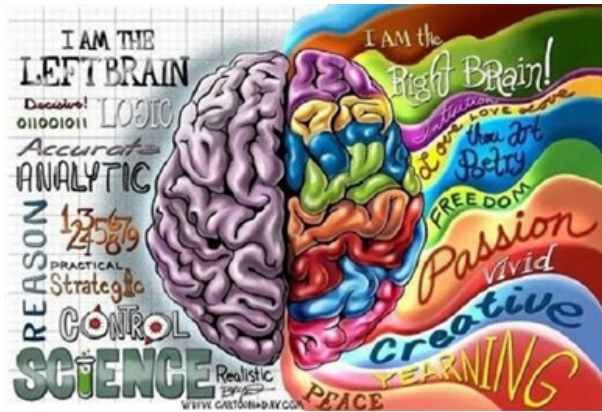
Creativity can get us out of the predicament when we are facing something new. Leaving the safety of the familiar, we can gain only experiences that will help the creative part of ourselves.

Kevin Byron took issue with the division of activity by hemisphere of the brain, suggesting that every activity entails both hemispheres.

Teryl Cartwright sparked a substantial exchange by telling us about Mark Rayburn's challenge to "write the song you cannot play". (Sample of his music: https://www.youtube.com/watch?v=TcUaMo1DxkY)

He advises *"You've got to schedule creativity even if you don't feel like it."* He also discussed the paradox of needing safety to be creative while being "vulnerable, naked, and courageous" in sharing it.

Simon Rae picks up the notion of 'failure':

> *you refer to the freedom to make mistakes but also the need to stop using the word failure. But surely for many students are not the two synonymous? Is it just a question of being careful which words we use? How do we talk about a mistake that a student has made without inferring that it is, perhaps, more failure than success?*

Norman concurred, adding that

> *I would like to add a few more thoughts on the subject of learning through 'making mistakes'. I quite like the idea of 'making' in this context because it implies you have to do something active. In the world out side higher education when you are trying to achieve something that you have not done before, we often don't know what we are doing or what the result will be until we have done it. Only then do we know whether we have achieved what we wanted or needed to achieve. And when we don't achieve it - we don't call it a mistake or a failure rather we think of it as a useful experience from which we learnt something useful - even if it's only we won't do that again. Perhaps the problem with higher education as a place for these sorts of experiments is that we don't offer enough opportunity for students to involve themselves in projects where the context and challenges are unfamiliar, and the outcomes are ambigu ous, where they have to experiment and make mistakes in order to find their way towards something that only becomes clear along the way. It's as much an issue of curriculum design as it is of assessment.*

And this takes the conversation back again to assessment!

Days 5/6 EMERGING THEMES & INSIGHTS, NEW LINES OF INQUIRY

The final days were left open for participants to continue conversations on emergent issues, and also to

"consider how the creation of such ecologies stimulates the teacher's creativity as well."

In addition, Norman introduced what was to be one of the most successful elements of the week:

WHY DO SOME THINGS ENGAGE US MORE CREATIVELY THAN OTHERS?

The Little Boy & All its Alternative Endings
http://www.creativeacademic.uk/creativehe.html

Participants were invited to create their own ending for the story, which they did, often providing beautiful images, too. This conversation features as a separate article in the magazine, so no more need be said here, other than thank you for the exquisite words and pictures contributed, and acknowledge the many relevant thoughts on what teachers need to do and not do to encourage students' creativity.

In response to the initial question, Zoglia Manou had learnt from the week's exchanges

> that the meaning of the word can be defined in multiple ways, depending on the situations that people are dealing with in their lives.

She offered a vivid illustration of this variability.

Whilst Simon Rae appreciated the poster, he proposed that

> Creativity is something that ALL are blessed with, unfortunately not all are afforded the opportunity to develop their creativity.

This led to a political question:

> Is creativity something reserved for a class of people that can afford to be creative? That's a bit of a dark thought to have so late on in the discussion. My apologies.


The dialogue moved into issues of process or product, and ended with Simon's contention:

> I do think that teachers can help students develop that process for themselves … which, to me, is saying that creativity CAN be taught.

Vasileios Gketsios returned to the theme of technology and its place in teaching. Others agreed that it is an integral tool in the 21st century, but a word of caution was expressed by Kostas Batzilis:

> The thing is that technology should be used reasonably because if someone overuses it, the educational purpose could be underestimated.

Anastasia Michali has concluded that it is the individual teacher's skills and temperament that best foster learners' creativity:
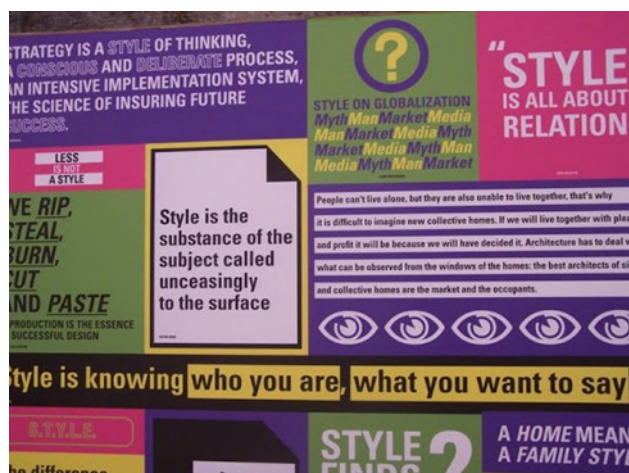
> I am saying that even if you employ the most innovative methods, games, activities... anything one can conceive, if you cannot win your students they will never feel at home and will not channel their creative energies.
>
> Winning your students, however, depends both on your emotional intelligence,your style and personality and also on factors such as the institution you work for. I was talking with a fellow educator who remarked that different employers make a great difference to how close he feels to his students, and how he behaves during the lesson. This may be to the strict guidelines imposed by some institutions or to the relationships between administration and tutors.

> To sum up, I am inclined to believe that the promotion of creativity boils down to one thing, one's personal style.

Space does not permit us to include all the thoughtful and challenging comments that have emerged in this week's events and the many practices that were shared, some of which we hope to include as separate articles in the magazine. Instead, I would urge you to read for yourself what the community thought. Let me conclude, though, with Clive Holtham's impressive summary. He explains the images below:

These were sketched in my A5 journal of the event, so really two visuals one per each page. The left hand side is about learning design, where I have drawn on the Learning Ecology model alongside Goodyear's pedagogic design model, plus a couple of other frameworks influential on me (Deming and Lefebvre). The right hand page has linked together a few things I have not explicitly joined up before. I used 3 medal colours, gold (impact on learner), purple (qualities/affordances) and grey (the underpinning inputs, particularly spaces which I put into 3 types as shown).

It was a struggle to get these ready before the final day is over, but this has been a wonderful experience within a collaborative community, especially from the students, but also everyone generously contributing.

Author's note: In order to preserve authenticity, participants' words are reproduced unedited. As a linguist myself, I am in awe of the fluency of our Greek teachers in a foreign language. Thank you all.

'The Little Boy' - a story by Helen Buckley with many alternative endings provided by #creative HE participants

Once a little boy went to school.
He was quite a little boy.
And it was quite a big school.
But when the little boy
Found that he could go to his room
By walking right in from the door outside,
He was happy.
And the school did not seem
Quite so big any more.

One morning,
When the little boy had been in school a while,
The teacher said:
"Today we are going to make a picture."
"Good!" thought the little boy.
He liked to make pictures.
He could make all kinds:
Lions and tigers,
Chickens and cows,
Trains and boats –
And he took out his box of crayons
And began to draw.

But the teacher said:
"Wait! It is not time to begin!"
And she waited until everyone looked ready.
"Now," said the teacher,
"We are going to make flowers."
"Good!" thought the little boy,
He liked to make flowers,
And he began to make beautiful ones
With his pink and orange and blue crayons.

But the teacher said,
"Wait! And I will show you how."
And she drew a flower on the blackboard.
It was red, with a green stem.

"There," said the teacher.
"Now you may begin."
The little boy looked at the teacher's flower.
Then he looked at his own flower,
He liked his flower better than the teacher's.
But he did not say this,
He just turned his paper over
And made a flower like the teacher's.
It was red, with a green stem.

On another day,
When the little boy had opened
The door from the outside all by himself,
The teacher said,
"Today we are going to make something with clay."
"Good!" thought the boy.
He liked clay.
He could make all kinds of things with clay:
Snakes and snowmen,
Elephants and mice,
Cars and trucks –
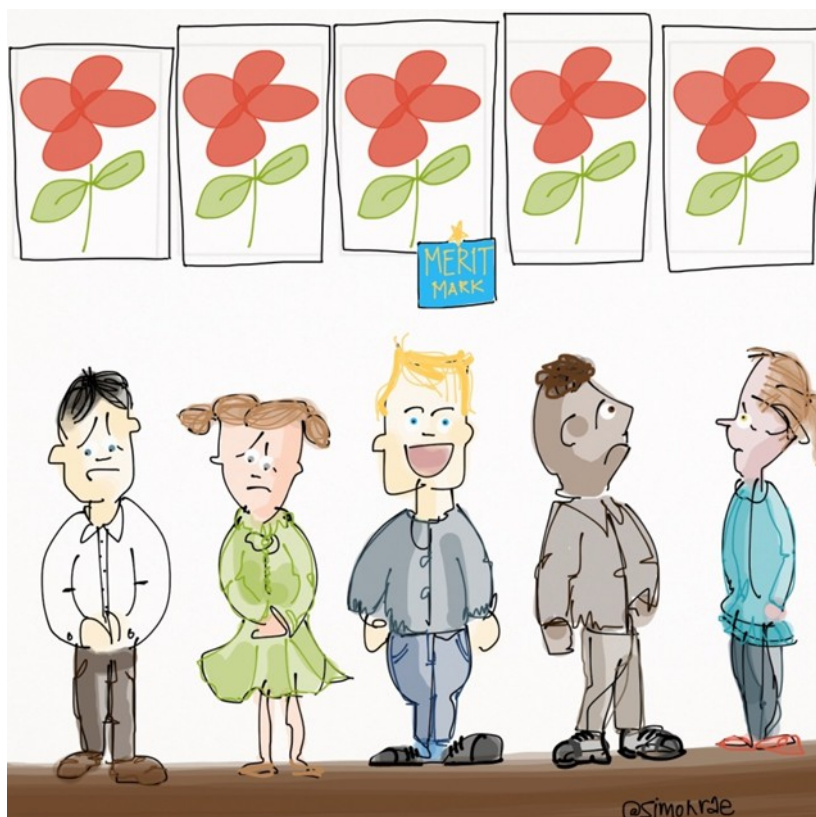
And he began to pull and pinch
His ball of clay.

But the teacher said,
"Wait! And I will show you how."
And she showed everyone how to make
One deep dish.
"There," said the teacher.
"Now you may begin."

@simohrae

The little boy looked at the teacher's dish
Then he looked at his own.
He liked his dishes better than the teacher's
But he did not say this,
He just rolled his clay into a big ball again,
And made a dish like the teacher's.
It was a deep dish.
And pretty soon
The little boy learned to wait
And to watch,
And to make things just like the teacher.
And pretty soon
He didn't make things of his own anymore.
Then it happened
That the little boy and his family
Moved to another house,
In another city,
And the little boy
Had to go to another school.
This school was even bigger
Than the other one,
And there was no door from the outside
Into his room.
He had to go up some big steps,
And walk down a long hall
To get to his room.
And the very first day
He was there, the teacher said,
"Today we are going to make a picture."
"Good!" thought the little boy,
And he waited for the teacher
To tell him what to do

But the teacher didn't say anything.
She just walked around the room.
When she came to the little boy,
She said, "Don't you want to make a picture?"
"Yes," said the little boy.
"What are we going to make?"
"I don't know until you make it," said the teacher.
"How shall I make it?" asked the little boy.
"Why, any way you like," said the teacher.
"And any colour?" asked the little boy.
"Any colour," said the teacher,
"If everyone made the same picture,
And used the same colours,
How would I know who made what,
"And which was which?"
"I don't know," said the little boy.
And he began to draw a flower.
It was red, with a green stem.

There is much wisdom in this simple and beautiful story that applies to all levels of our education ecosystem. How can we expect learners to discover their own creativity if we expect them to wait until we have told them what we think it is?

How can we expect them to be creative if we convince them, through our pedagogical practices, that they must only look for one right answer to a challenge that demands their creativity? And that the only learning that will be recognised is what we deem to be important. How can we expect them to create their own ecologies for discovering the many possible answers to their own creative challenges in life if we never give them a chance to create their own ecologies for learning while they are engaged in formal learning?

COMMISSIONING EDITOR'S CREATIVE CHALLENGE.

The end to this story is quite sad. Would you like to provide an alternative that opens up the possibility for this little boy of a more creative and fulfilling future?

Please share your alternative endings in #creativeHE and we will incorporate them into the magazine

ALTERNATIVE ENDINGS

Alexandra Gkouzou

This story filled me up with mixed feelings. At first I was disappointed by the behaviour of the teacher then the repetition of the phrase "Wait! And I will show you how ", irritated me enough and frustration I would like to be able to shout "Wait! He will show you how, it's his world " towards the end it led me to a sadness for the creativity of this child. So I don't want to change the ending but I would like to add something…

After few days the teacher said, "Today we are going to make a picture." And the little boy stood there for a while… and then he began to make beautiful flowers again, with his pink and orange and blue crayons!

Natassa Kailari

How would I know who made what, "And which was which?" "I don't know," said the little boy…. and then the teacher said: "Close your eyes. Imagine you are in a park. It's Sunday morning, the sun is bright and you walk among the plants, the trees and the flowers. Colours are everywhere. Choose a flower that makes you smile, that smells beautiful and draw it"

Perhaps children who lost their creativity need to be shown the way to find it again, to look inside them, to be given opportunities to discover their abilities. The story of the "little boy" reminds me of the way we teach literacy here in Greece at the last grade of high school, to those "poor" children who try to achieve a place in University. We direct their way of thinking by giving them specific answers to matters and topics in regard to a poem or a literature text. Are there specific answers to literature issues? Could anybody of us really know what the author was thinking? We only assume, we only try to verge on an issue in various ways and through various thoughts.

Zogia Manou

The little boy started looking around him, not knowing what to do. He noticed that his classmates had already started making their pictures and they were looking pretty happy.

The teacher advised him: "just look around you, not only with your eyes, but with your heart as well". He kept wondering what to do, when, suddenly, he turned his look outside the window. The small schoolyard garden was full of colourful flowers and the light breeze made them look like they were dancing.

The little boy reluctantly started making his picture. A little smile appeared on his face. As time passed, the smile kept getting bigger and bigger. When he finished his picture, he felt an indescribable joy. He named his picture "dancing flowers".

Anastasia Michali

How would I know who made what, "And which was which?" The little boy fell silent and started drawing something. After a while he stood up, holding his drawing with both hands in front of his chest, but with the drawing facing his chest, "Why know who made what? You only need to smell as many flowers as you can!"

Kostas Batzilis

The little boy was waiting for the teacher to draw something on the board but she didn't. He looked around at the other students' drawings and he saw that everyone was drawing something different. Suddenly a bird flew into the classroom and landed at the teacher's desk. It was a small colourful bird.

The boy felt free and happy inside him. This reminded him of his repressed creativity. He took his pencils and started drawing the beautiful bird. After that day, he never felt the need to wait for the teacher's guidance again.

Olympia Deligkari

'…a great surprise overwhelmed the little boy… he waited patiently for his teacher's instructions, but she didn't do anything, she didn't say anything, she didn't show anything. His inactivity and idleness was growing bigger… he felt that no picture could come to his mind. The teacher was surprised and asked him what were wrong and he couldn't draw.

The little boy answered, I only know to draw a red flower with a green stem… 'I don't really believe this. I think you can do more than that', the teacher replied. So, she led the boy to the schoolyard that was full of beautiful, colourful, fragrant flowers. 'Take a look at them, watch them, touch them, smell them', he intrigued him. 'Close your eyes and think with your heart'. When they entered the classroom, the little boy with the remembrance of the smell and touch of the flowers, he painted an endless meadow full of colourful, various flowers… '

The story of the little boy was very moving and inspirational; full of deeply meanings regarding the current educational system and the role of the teacher. It reminded me intensely a scene captured in one of my favourite books that I would like to share with all of you:

'…And after some work with a colored pencil I suc-ceeded in making my first drawing. My Drawing Number One. It looked something like this.
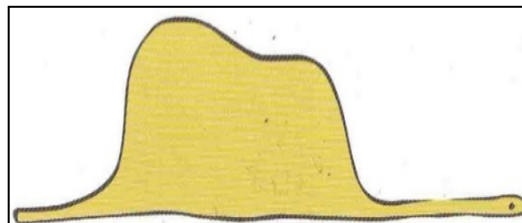
I showed my masterpiece to the grown-ups, and asked them whether the drawing frightened them. But they answered: "Frighten? Why should anyone be frightened by a hat?" My drawing was not a picture of a hat. It was a picture of a boa constrictor digesting an elephant. But since the grown-ups were not able to understand it, I made another drawing: I drew the inside of a boa constrictor, so that the grown-ups could see it clearly. They always need to have things explained. My Drawing Number Two looked like this.
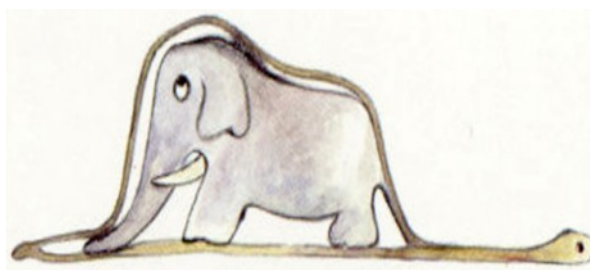
The grown-ups' response, this time, was to advise me to lay aside my drawings of boa constrictors, whether from the inside or the outside, and devote myself instead to geography, history, arithmetic, and grammar. That is why, at the age of six, I gave up what might have been a magnificent career as a painter…'

So, I always try to remember: "What is essential to the heart is invisible to the eye".

Dora Koutsou

''… and he began to draw a flower. It was red, with a green stem. But it was not only this. He continued drawing trains and boats, lions and tigers, chicken and cows beside the flower with intense moves at warp speed giving the impression that he had a lot of thoughts unrevealed … But the drawing was speaking itself.''

The above alternative ending requires as a condition that creativity is not something that can be taught but something that is inherent in us. After a long time that creativity was completely ignored, it is finally encour-aged and comes back in a way that becomes apparent all the pressure that the student had been under. I would like to share some thoughts about this. Is there any probability that repeatedly ignorance of experimental learning and absolute absence of creativity in the classroom do not dissuade students from fostering their creativity? Can creativity be taught? Or is creativity simply a mindset or way of life?

42

Aikaterini Rousou

... "If everyone made the same picture and used the same colours, how would I know who made what and which was which?" Then the little boy thought for a little. "So why my previous teacher showed us how to draw flowers, what colours to choose and then she expected from us to draw the same?"

The teacher looked at him with a little concern and then she smiled and answered; "Your teacher maybe wanted to show you a way in drawing a flower, but there is no right or wrong way to do that. You are the one who will decide the way to do it. Use your imagination and maybe you will show in the class-room one beautiful way to draw flowers." So the little boy started drawing. He used blue crayons and yellow crayons and then purple crayons and couldn't stop drawing until the school bell rang. It was the only student who was still in class and when he finally finished, he showed in pride his picture to the teacher; "Look! I made a picture of flowers!"

His teacher looked at the picture in surprise, she smiled and answered; "Well done my boy! This is a wonderful picture of flowers!"

Olga Broupi

" ...The next day at school, the little boy made a new picture, a red flower with a green stem. The teacher smiled gently and complimented on his drawing. The little boy smiled too.

The next day, the little boy drew another picture, a yellow flower with a green stem, the teacher smiled to him once more and she praised his good work. The little boy smiled as well.

Day after day, the little boy was drawing colourful flowers with green stems and the teacher always smiled and so did the little boy.

Then one day, the little boy while he was searching in his backpack, he came across his old crayons, his

most favourite ones, the pink and orange and blue crayons. This time he drew a green flower with an orange stem, a blue sun, a red garden and a yellow tree! When he offered his drawing to his teacher, she didn't say a word. She just gave him the biggest smile he had ever seen and he, in return, gave her a hug, his warmest hug!

Now his drawings are hanging on his room walls and on his classroom walls and on this teacher's house walls… and soon enough his drawings will be hanging on a gallery and museum walls..." I don't think there is just one way to teach creativity, a bad one or a good one. The most important way to "teach" creativity is by encouragement. Encouragement to question, to search to define and redefine problems, to take risks, to allow mistakes, to identify and overcome obstacles, to collaborate, to identify other viewpoints. We learn to be creative by experimenting, exploring, questioning assumptions, using imagination and synthesising information.

Creativity is not just a useful skill to teach to students and people but a way of thinking, a way of life. There-fore, a teacher cannot teach creativity unless himself, doesn't think creatively and live creatively. So, teachers should think more carefully about their values, goals, and ideas about creativity and show them in their actions, because let's not forget that they serve as role models for their students.

Elenh Tsikelh

'The little boy anxiously awaited his teacher to show him how to paint a flower. And the teacher turns and says ' I am sure that you have seen a lot of flowers in your life. ' ' Yes of course. (says the little boy) but I am waiting[for you] to show me the one that you want.' And the teacher says, 'My little boy you will find many people in your life who will tell you how to act. But they will show you how to do something because they only know that way. Every person has his/her own reality and you have to learn to respect the other realities but at the same time not to lose your own one. Every time turn inside

43

your soul and do what you think is right. Now listen A FLOWER IS LIKE THE SOUL, IT OPENS UP TO THE SUN. So close your eyes, feel the sunlight and remember the most special memory about a flower that makes you feel unique. And then follow your heart and let your imagination animate [you].' And then the little boy remembered his lost creativity and starts again in the way it used to be.

Vicky-Anneta Tsoulfaidou
The days were passing by, and every day, when it was time to paint in the class, the little boy always painted a red flower with a green stem.

After a week has passed, the teacher got into the classroom and said to the children, "Hello to everyone! Today we have a different task in painting. I will give back to you, your first painting and I would like you, to paint something else in it. We will do that every day in this week, and at the end, we will all have a brand new painting, with a lot of small or big pictures in it"

Most of the children liked the new idea, but the little boy hesitated and seemed kind of frightened. The teacher saw that and said to the little boy, "It's ok my little boy, you don't have to be afraid. All these days, you have painted all those beautiful red flowers with green stems. They are really beautiful but don't you think that it is time, for other flowers, or trees, or animals, or suns or moons, or maybe humans, or even children or anything else you like, to come to your painting? I bet your red flower will appreciate a lot, some good company. It seems to me kind of lonely and the fact is, that all your red flowers are in your other paintings and they cannot come along".

The little boy thought about it for a while. He was really bored of all these red flowers with green stems. They reminded him, his previous school,

where he learnt "to wait, to watch and to make things just like the teacher. His new teacher was right! So he said, "I think I can try something different today. Once I liked to paint lions and tigers, chicken and cows, trains and boats" "That's the spirit", said the teacher and the little boy started to paint. Every day the little boy painted something new. At first he painted a tree. Then he painted a big sun. Then he painted some small flowers, not red and not with a green stem. They were small blue flowers, without a stem. At another day he painted a cow. He liked cows a lot. Everyday his teacher, watched him painting, and she had a big hospitable smile on her face.

And guess what happened next. One day ,when he went back home from school, after walking down the long hall and going down the long steps, he felt tired and fall asleep. He slept for hours and his sleep was deep. While he was sleeping, he had a dream. In his dream, the cow ate the red flower with the green stem!

A word from the illustrator
Simon Rae
A word or two about my illustration (albeit aware that such work should stand on its own without need of explanation!). It was obviously done in response to the story of the Little Boy which mirrored uncomfortably the response that I sent to Miss Alexis way back in October - especially the way the school system seemed to stifle the creativity of my three children.

I intended my drawing to show the 'end of week' exhibition of art work in the Little Boy's class. All the children have pinned up their picture, all having been similarly 'taught' to paint flowers the same way. But there always has to be a 'winner' doesn't there? The child who does the best picture and deserves a merit mark or gold star from the teacher. Which is great for the chosen child (white, male, middle-class, image of

the teacher?) but discouraging for the others who have all done their best and not been rewarded or encouraged. No wonder so many get turned off creative stuff. And who amongst us has not been in that situation - doing your best to do what teacher (or line manager) says they want and watching someone else get the plaudits for something no different?

Creativity is a special quality that I think we are all born with the potential to develop ... but it can be stifled, checked or crushed all too easily. Alongside encouraging creativity in children it is important to develop their self-awareness and an ability to be self-critical. With those skills children have a better chance of weathering the system's attempts to de-creatify them.

And I understand that 'teaching creativity' is difficult. It is hard to assess creativity in so many subjects. Take maths. Maths can be creative, playing with numbers and finding quantitative relationships between things, but to get to this interesting level you have to be familiar with so much boring stuff. And in the classroom, when you are teaching the basics of simultaneous equations to year 10, how much creativity can you give credit for? The answer is either right or wrong. Do you give a gold star for a colourful presentation? Can you give credit for working creatively to the wrong answer?

I think my word or two is done. Hope you liked the poppy pictures.

Commissioning Editor's Reflections

Sometimes we recognise affordance in something but when it has been acted upon we are surprised by *how much* affordance has been realised. The story of 'The Little Boy' illustrates this phenomenon well. I clicked on a link that Teryl Cartwright posted and recognised the profound truths in this emotionally engaging story. I thought that other participants would feel similar emotions and resonances as I had, and the idea of involving them in inventing a new ending came into my mind as a way of encouraging them to use their creativity.

Within a few hours the first post had been made and over the next 48 hours 9 participants had contributed their stories some of which carried lovely illustrations. Each story provided a different perspective on creativity and made important points about the way education nurtures or inhibits creativity in children. Together, the stories illuminate how the teacher adapts her general ecology for learning and creative achievement in order to accommodate the little boy. In this way the teacher's learning ecology for all, becomes the teacher's ecology that nurtures the individual child.

Natassa and Olympia's alternative endings illustrate this well by showing how the teacher recognised the problem specific to the child and through gentle but purposeful coaxing enabled him to see and appreciate the world differently and use his imagination to perceive new and different affordance in the opportunity to draw that was being provided.

Zogia describes the environment in which the little boy was learning recognising that he will receive feedback from the way his peers are involved in the same task. In her alternative ending the little boy motivated himself to look at the world freshly and see new affordance in the flowers, that in his imagination, danced.

Anastasia also draws attention to imagination and to the sensorial affordances within our ecology for learning and creativity.

Kostas shows how, in our own ecologies for learning and creativity, we gain inspiration from things and incidents that capture our attention and trigger an emotional relationship. Like the unusual act of a bird flying into the classroom or the story itself

Olympia captures something deeply important in her own story that parallels 'the little boy'. She highlights how critical judgements on the results of creative effort, by significant others, can be quite damaging, as our confidence can be fragile. Many of the posts implicitly or explicitly highlight the need in an ecology for learning and creativity, for spaces that are non-judgemental or at least where feedback is cast in ways that encourage development in positive ways. Spaces where we can safely take creative risks without fear of damaging our fragile confidence. Olga's story shows that such encouragement need not be verbal - it can be embodied in the way a teacher behaves.

Aikaterini and Dora's alternative endings suggest that although a poor ecology for learning and creativity can damage and inhibit personal creativity, education never kills the creative spirit completely. It lies dormant until an opportunity finally presents itself when it can emerge again.

Aikaterini emphasises the importance in a teacher's ecology for learning and creativity of creating an environment where there is no right or wrong way of achieving something only infinite possibilities that individual's must choose from.

Elenh uses the affordance in the challenge confronting this little boy to teach him an important lesson for life. In this way she not only changes the way he thinks and acts when confronted with the challenge of painting a picture, she also teaches him something about the way people are and the way you have to deal with this.

Vicky-Anneta's approach is to reframe the challenge to move beyond the obvious routine of paining a flower to open up the possibility of paining a whole world and the stories in it. She also used humour to convey meanings about overcoming the impediment to this boy's creativity.

These teacher participants offered so many different ways of engaging with and solving the challenge for this little boy and his teacher. Together, these alternative endings provide important lessons for the ecologies teachers can create to enable their students to fulfil their creative potential through the affordances they create in and outside their classrooms.

Why?
I invited participants to explain why the story and creativity challenge were so effective in engaging participants. *Vicky-Anneta Tsoulfaidou* captured this very well in her response.

'In my opinion, the challenge of giving an alternative ending to the story of the little boy, was very interesting. We were given a chance to end a story , differently and in an optimistic way. Personally this aroused my interest and provoked me [into] using my imagination. The story itself was simple but [indicated], in a very nice way, how the little boy's creativity was suppressed by his first teacher.

I think that most of us , were engaged creatively in this activity, because it gave us freedom to express our own thoughts and imagination. There weren't any strict rules about what is considered to be right or wrong. We weren't at any time criticized. Additionally, the activity was not obligatory.

Anyone could participate or not, and there wasn't a strict deadline. We are all in some way involved in education, so this story of the little boy, touched our hearts and made us to want to help it. So the activity was purposeful and had a meaning. It also didn't required specialized knowledge, everybody could participate in it. And it was an amusing activity. When creating and reaching the optimistic end of the story, someone feels happy and fulfilled. It's nice to give happy endings and to give solutions.

To sum up, some things engage us more creatively than others, because:
~they are interesting (this can depend of our own interests)
~they trigger our imagination
~they do not set limits to our thoughts
~they are purposeful and have a meaning
~they are amusing, they make us feel good
~there are no rights or wrongs
~they have symbolisms related to everyday life
~they are problem-solving (they give solutions)
~they develop in free and nourishing ecologies.
~they do not require special knowledge

There is definitely an allegory in little's boy story that touches our deepest human values (the good and the bad, saving the unprotected etc). It is our humanity that has the chance to be expressed in this story.

This analysis relates well to the idea of a pedagogy for creativity and the sorts of challenges that need to be incorporated into a teacher's ecology for learning and creativity. The list of reasons reminds us of just how complex our own motives are for engaging or not engaging with an affordance that offers the possibility of creative thinking and action. Conversely, they also reveal why we are not able or willing to engage if these sorts of conditions are missing. I particularly liked the way that Vicky-Anneta's response captured the idea that creativity involves an integration of emotions, imaginative ideas and more rational thoughts which individuals blend to create new meaning and feelings of happiness and fulfilment.

For myself, I have been reminded that there is something very special about a story that engages so many people and encourages them to spend time and creative effort in responding to the stimulus. The simple challenge of inventing a new ending - a better more optimistic version of itself, opened many possibilities. It teaches me that my creativity as a teacher is to try to search for, find or invent affordances that like this,

capture the imagination and stimulate the creative will of participants.

There is never a single right answer where creativity is concerned, rather there are many possibilities that we must choose from. The responses to this story are a wonderful illustration of the creativity and empathy of the teachers who participated in the #creativeHE conversation. **I think the collective contributions that are summarised here, demonstrate so well the ways in which creativity emerges from an ecology for learning and creativity in action.**

Acknowledgments: I am grateful to all the participants who used their creativity to share their imaginative endings to The Little Boy story. It has been an inspiring experience to witness your ingenuity.

Thank you also Teryl Cartwright for posting a link to The Little Boy story during the #creativeHE conversation which liberated the creativity of these participants.

Also thank you to Simon Rea for your thoughtful illustration. It's clearly true, one piece of creativity begets another.

Norman Jackson
Creative Academic Magazine
Commissioning Editor

… and the conversation continues still! You can follow the responses to my own posting by going to the site.

Jenny

Executive Editor

A not so happy ending

This is a true story, that I have previously shared with some of the community, and which aptly illustrates the repercussions of bad teaching.

As a child, I was always creating: writing, sewing, drawing, building – you name it. On starting grammar school at the age of 11, I was keen to participate in Saturday clubs, and joined an art class. I was, and remain (paradoxically for a teacher) shy, but overcame my natural reticence and one Saturday took in a book of portraits I had sketched over time to show to the teacher. At this point, my memory blanks out, protecting me from the detail of what ensued. The gist of it was that the teacher was highly critical and dismissive of my art. The result: I lost confidence, and from then on drawing was rarely on my list of pastimes.

If only I had had a teacher with the insight to encourage and improve, without humiliating me! I hope it is a lesson I have put into practice over my own career as a teacher of children and adults, from beginners to advanced learners.

It is heart-warming to read the sensitive endings created by our Greek friends: the development of their students is in very safe hands!

101 Creative Ideas so far...

Eleanor Hannan

The 101 Creative Ideas project was launched in September 2016 as part of the Creative Pedagogies & Learning Ecologies Project 2016-17 programme. The idea behind 101 Creative Ideas is to collect and share ideas that promote and foster creativity in higher education from practitioners all over the world. In doing so, we're creating a valuable community-generated resource for growing and sparking new ideas and practices for creativity.
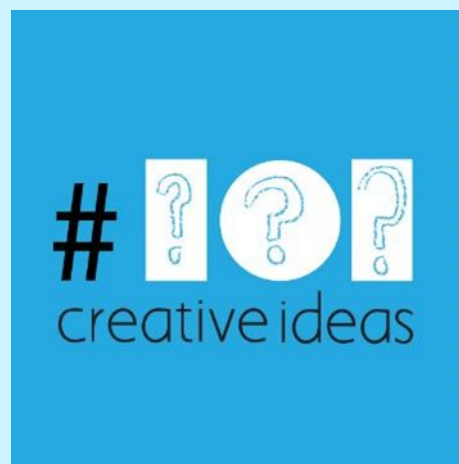
Here, I would like to share some of the themes emerging in the project and highlight a handful of contributions.

We've have ideas for novel approaches to common academic activities, such as academic reading. For example, Sandra Sinfield contributed an idea for creating 'Scrolls' as a way to tackle course texts with students. Some ideas have looked at different or additional ways to demonstrate learning. For example, Juliette Wilson-Thomas suggested asking peer reviewers to respond to work with collages or poem instead of the ordinary written text (see Creative Peer Reviewers).

It is really interesting to see that a lot of the creative ideas also feature students taking charge of things traditionally within the role of the teacher or the individual. Chrissi Nerantzi suggests co-creating a reading list rather than prescribing the key texts, and Robert Jenkins contributed an idea to create research surveys collectively, rather than individually.

Several of the contributions have been about techniques for encouraging creative thinking in both staff and students. Teryl Cartwright contributed one of each: for students, you could try running a session where they can only answer questions with questions; and for staff, try creating analogies from within your discipline to use as teaching aids.

Finally, we've starting to get ideas relating to the use of technology in teaching. These range from offering alternative ways of responding in class, to new ways of communicating information to students, like Theresa Ni cholson's idea to use Trello to help students with their group projects.

We would love to see some (or all!) of the ideas shared by teachers and students on the #creativeHE discussion (30th Oct - 4th Nov 2016) contributed to the project. All the ideas are available under a Creative Commons License, so they form part of this exciting resource for fostering creativity in higher education.

Visit our page and contribute your ideas: 101creativeideas.wordpress.com/contribute

And on Twitter: #101creativeideas

The 6th Grade Proudly Presents A Project on Theatre and Digital Storytelling from a Learning Ecology Perspective

Theodora Tziampazi

Theodora is a Primary School teacher in Greece. She holds a Masters degree in Teacher Education and Training while her thesis topic is focused on Creative Writing in Education. She is experienced in designing workshops aiming at the development of creativity. Her main interests include Creative Thinking, Literature and I.C.T. in Education (especially digital storytelling and programming). She is constantly enriching her knowledge and expertise by attending seminars and applying projects in public schools and other cultural/ educational organizations. "My participation in the #CreativeHE and Creative Academiccommunity has opened new horizons and enabled me to develop new relationships with people who share my interests."

Background

The article has been developed through my participation in the Creative Pedagogies for Learning Ecologies discussion in the CreativeHE Coogle+ Community[1]. Members were invited to share their thoughts on topics that emerged through a conversation. A background paper[2] encouraged participants to apply the idea of learning ecologies to their own pedagogical practices and critique and develop the model.

I drew on my past experiences as a teacher to select some pieces of work I had been involved in to analyze them in the light of the proposed learning ecology framework. First thing that came to my mind was a project I had undertaken with my former students. I opted for that teaching experience, owing to its strong impact on the people who were engaged. So, I entered the #creativeHE discussion with the following post:

My post

Looking back at the previous year, when I was a 6th grade teacher in a Greek primary school, I pinpoint some moments of a creative project I would like to share with you.

The end of the school year was about to come and we were all vigorously preparing for the closing event of school life, the final fest (not test!) before summer vacations.

Most students in my classroom wanted to participate in a theatrical play. Inspired by the life and atmosphere in the Greek educational system, I wrote a script for a theatrical play, titled "School Paranoia". It included themes and scenes familiar to everyone who is involved in education (teachers, students, parents) with a sense of humour and modern theatrical structure. The script became truly transformed during the rehearsals, when children and I came up with new punch lines and modifications to the plot.

In addition, we created a video, a digital storytelling with photos and videos of the students, presenting their development through Primary School years and their thoughts about the next step (secondary school). It was a collection of memories and a mix of expectations, fears and hopes.

I'd like to underline the following observations:

This creative experience was purposeful. The kids really wanted to demonstrate something special and impressive, as it was their last year in Primary School, the "end of an era". So, they worked hard, with enthusiasm and responsibility.

I consider my interests and hobbies important in the beginning and support of this process. I love experimenting with arts, creative writing and video editing programs. I say this because, I believe in teachers having a background knowledge and an urge to play and create. However, it was the feedback from students and the collaboration with them which gave the final result.

My favourite moment was when I encouraged the children to create an extra scene by themselves, after reflecting on the previous parts. They had already changed many things throughout the script, but this last part was completely their scene.

In general, working on this play, I noticed that the content was meaningful to all of them. They identified with the roles and expressed themselves freely.

It was challenging to remain "politically correct" and respectful while showing some aspects of "school paranoia" (e.g. some parents tendency to criticize and put the blame on student or teacher, teachers' and students' secret thoughts in classroom). Eventually, it was accepted as a benevolent satire. It is crucial that we build a relationship of trust and goodwill, so that every difficult-controversial topic can be approached carefully, positively .

I attempted to interpret this pedagogic narrative using the model of an ecology described in the background paper[2] (Figure 1).

Figure 1 My interpretation of the ecology I created for learning and creativity

The post was welcome by other members whose apposite comments indicated that a deeper, more extensive analysis of this pedagogic case was justified. The aim of this article is to extend my analysis to interpret the elements of this example of pedagogical practice drawing parallels with the components of Jackson's model of a learning ecology[2,3] (Figure 2).

The ecology of our learning project

The model provided in the background paper2 (and below) provided the template for the illustration I created for my post. Here I elaborate in more detail the characteristics and dynamics of the learning ecology.

Figure 2 Model of a learning ecology
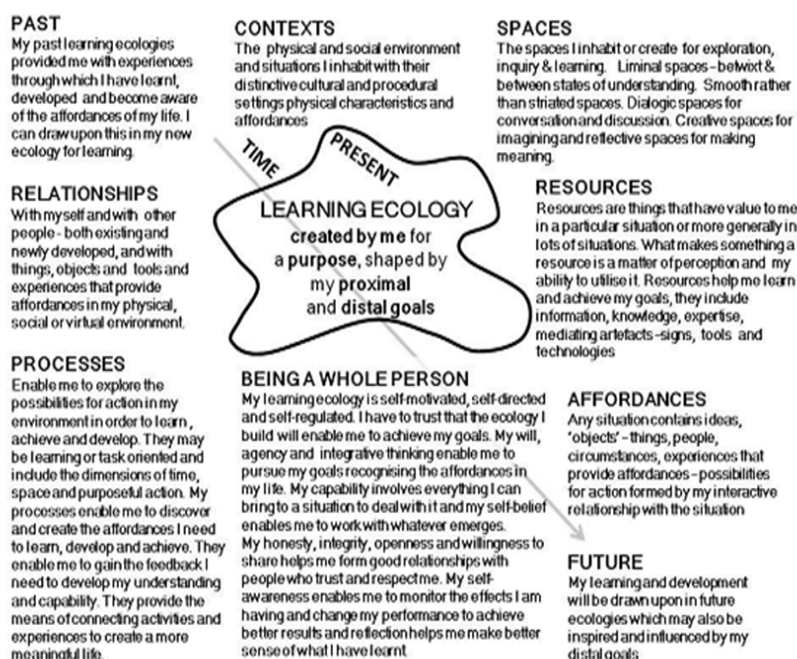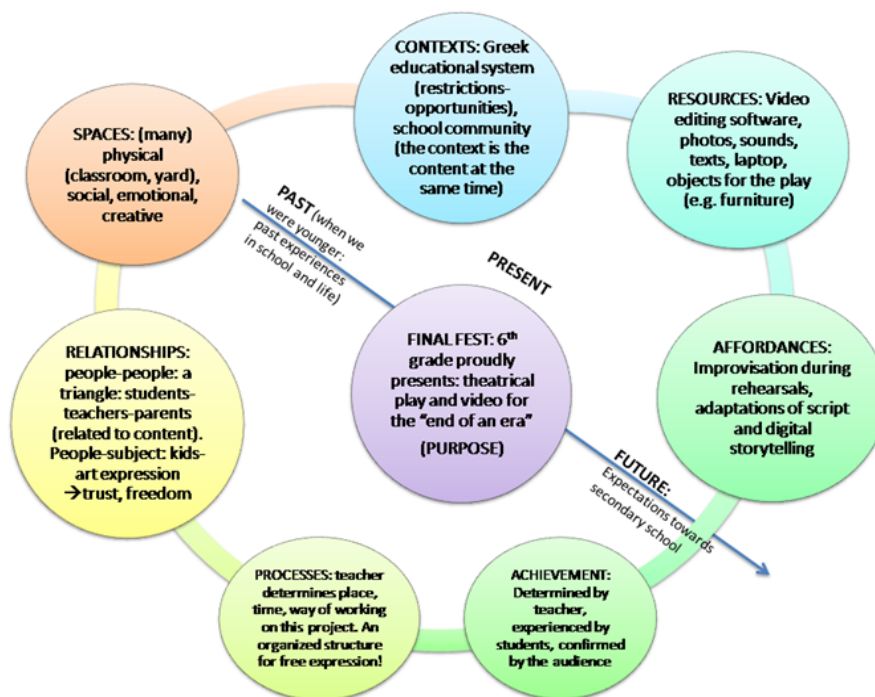
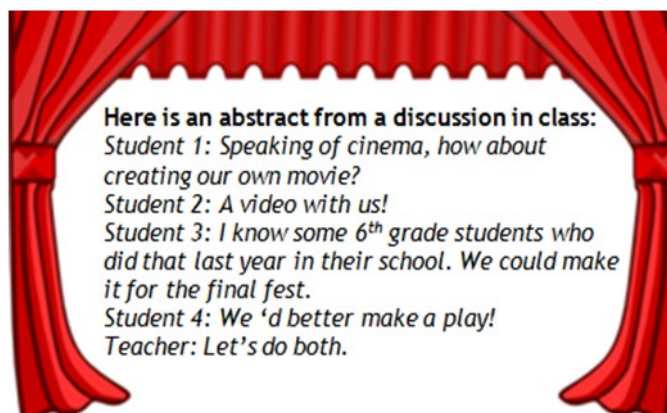**1 PURPOSE(S):** The idea for this ecology for learning and creativity emerged by connecting two goals set simultaneously in a great opportunity of timing. I could argue that as the teacher, I could see the affordance in the situation for a novel learning project and facilitated discussion to encourage the affordance to be realised through the ecology we subsequently co-created.

Our class was involved in a language lesson, particularly a unit referring to *Cinema and Theater*. At the same time, we were looking for an ingenious way to say "goodbye" to Primary School in view of imminent

graduation. After a class discussion, *we* ended up deciding to undertake this project, which would fulfill the learning goals of the unit and embed a purpose that had considerable meaning to all participants. Hence, a double purpose lies at the heart of the ecology. It's also significant that the decision to create this ecology was taken by everyone who was participating in the ecology - not just me the teacher.

The personal dimensions outlined above in conjunction with the 'content-context' relationship described below made the ecology personally relevant, <u>meaningful</u> and <u>purposeful</u>.

Here is an abstract from a discussion in class:
Student 1: *Speaking of cinema, how about creating our own movie?*
Student 2: *A video with us!*
Student 3: *I know some 6th grade students who did that last year in their school. We could make it for the final fest.*
Student 4: *We 'd better make a play!*
Teacher: *Let's do both.*

The learning ecology model argues that purpose is rooted in our proximal goals which are informed by our distal goals. I would represent the stimuli and the whole learning experience generated through our ecology in the way a stone dropped in the water would produce circular patterns of waves (Figure 3). Proximal goals precede, come naturally first and distal goals encompass these short-term pursuits in a newly gained territory for action. To put it another way, proximal goals are the reason distal goals can exist, while distal goals give proximal goals a reason to exist. Once a goal is achieved, we are expanding our perspective and learning potential to broader spaces opened up in bigger circles of experience to reflection.
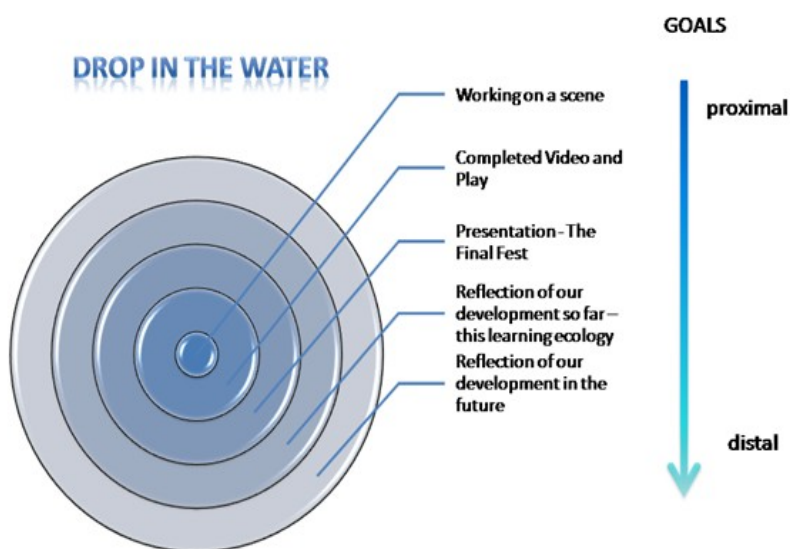
DROP IN THE WATER

Working on a scene

Completed Video and Play

Presentation - The Final Fest

Reflection of our development so far – this learning ecology
Reflection of our development in the future

GOALS

proximal

distal

Figure 3: Representation of the purposes and their effects on experience in our ecology for learning

It can be inferred that the above description, including authentic needs and purposeful action, as well as the openness of the process (which can be clearly seen through the AFFORDANCES component) conjures up the qualities attributed to the project method in Kilpatrick's[4] definition:

2 CONTEXTS: The project took place in a primary school environment reflecting the culture and traditional paradigm which underlies the Greek educational system and the ethos, climate and culture of the school's ecosystem. Despite the fact that the curricula theoretically declare that the cultivation of creative thinking is a primary concern, in practice this is not happening. The learning process is oriented towards an excruciate accumulation of information and rote learning. Students are not encouraged and enabled to participate actively in their own learning and their creative potential shrinks by a tendency to place emphasis on formalism and mechanical procedures. A "serious", "science-looking" body of knowledge is the dominant paradigm whereas artistic expression is undervalued and recognising the diversity in students' talents, needs and capabilities is neglected. Therefore, facilitating an ecology for learning and creativity through arts and project-based learning ran counter to the prevailing educational culture. The fact that we achieved this did show me that it was possible, even in this seemingly challenging context, to overcome the obstructions of an educational "status quo" and introduce new forms of interactive teaching that encouraged learners' creativity.

A striking observation on context in this particular ecology is the fact that the *context* is strongly identified with the *content*. The very theme of the script play and most units of the video refer to the way education is approached and experienced by the members of a school community. In other words, the project is a learning ecology about a typical learning ecology, schooling itself!

3 AFFORDANCES: Creativity is far away from following a rigid, preconceived plan. On the contrary, it involves seeking and seeing opportunities for change and revision, driven by a playful desire to improvise and experiment. Perhaps the key affordance I perceived in the evolving situation was the affordance for learners to use their imaginations to play with ideas. Adopting this philosophy explains why the material I brought to class in the first place underwent many modifications before it was shaped in its final form. The pen was constantly correcting, crossing out and adding notes in the initial printed version of the script! The montage of the video was a total of innumerable clicks on the menu of the Editing Program used. The specific examples of emergent changes give an idea of the plasticity in this process (Table 1), these forms of emergence reflect the idea of an "emergent pedagogy", involves *"interactions among students are equally important; students and teachers are collectively contributing to a somewhat unpredictable project with an insistently social dimension, which is in turn crucial to the individual learning of all involved."* [5]

Table 1 Examples of emergent changes

Play with the play	
Interventions in the sript	**Observations**
Add lines, omit or change words	Some lines could not function as imagined , or a more suitable idea popped up
Brainstorming for stage direction	When does a child appears on stage (after a certain line is heard) and where do they come from (position of entrance)?
Brainstorming for setting	How the objects will be placed/arranged on stage? What kind of objects will we use? How will we get them? (Someone brought a phone device from home)
Creative writing	Part of the play written by students (Write your secret thoughts during a lesson you are not interested about)
Selection of music tracks	Which song is the most suitable for this scene? What sound should we opt for a phone ringing? (the one which sounds like a bell)
Create an extra scene by students (a response to their role)	Kids, one by one, come on stage for the closing scene, bringing a punch line and a wave they inspired by their role (a post-modern collage of contributions)
Other decisions	How will we arrange two parallel actions in a scene (acting and audiovisual support)?

4 RELATIONSHIPS: The nature of the project ie its human-centered theme and the element of self-reference, makes it interesting in terms of intrapersonal and interpersonal relationships.

Regarding intrapersonal aspects, we should look at features like: statements of children in interviews about their feelings, the empathy they develop when playing a role, their general engagement in creating a product presenting themselves and the consequent reflection and self-discovery they are motivated to do.

What is more, this exploration takes place collaboratively, leading us to the interpersonal relationships found in our ecology. In other words, we shift from ego- to eco-logical frames of mind. Students-students and students-teacher, are the basic pairs of people-people relationships noticed in this classroom-based process, characterized by teamwork, avoidance of judgments, and absence of assessment as it is usually perceived in traditional educational practices.

As seen in Figure 1, the individual ecologies involved (ie teacher's ecology and each student's ecology) are connected and integrated in a broader collective learning experience. In other words the composite ecology is co-created by everyone who is involved. All participants constitute a team (in view of making a product) thus displaying the characteristics of a "collective whole person"[2].

Going further, the content and context of this particular ecology comprises the dynamic of social interaction in the whole school ecosystem: Students, teachers, principals, parents and the arrows that might be sketched to depict the complex connections among them are all included in the content of the final product. Also, friends, relatives and members of the broader community who attended the final fest became parts of the sharing.

Another type of relationship can be traced between the people involved (teacher and students) and a subject or idea . We selected "artistic expression" (via theater, music, video-making, creative writing).This relationship allowed for free expression, trust and "sustained" the passion and joy of creation amongst participants.

5 SPACES: The physical spaces contained in our ecology were the classrooms and the yard of the school and the stage where the final fest was hosted. Social spaces involved people, teachers, the principal, classmates, parents and all members of the local community who were openly invited to attend that event. As far as virtual spaces were concerned, we could consider the internet, cloud, e-mail and file sharing services (Figure 4) which facilitated our learning.

Apart from the categories already mentioned, we are going to examine some selected aspects of mental/ psychological spaces created as "deeply meaningful learning spaces"(Gils & McCarty 2016)[6].

Standing at the "end of an era", 6th grade students reminisced and reconstructed memories from their past so as to draw meanings from their experiences. They also expressed their feelings, expectations, fears and hopes as they imagined their future and the imminent changeover into secondary school and a new stage of development with all the physical, intellectual, emotional changes adolescence entails. Obviously, in such a space, learners embarked on journeys of self-exploration journey which deepened their understandings of themselves.

Spaces for play: The term "serious play" is the best term I can borrow to show the character of this space as it was unfolded in our experience. A playful atmosphere with jubilant improvisation, performances and experiments was kept till the end. In addition, the rehearsals and planning were characterized by responsibility and hard work.

> **Spaces for imagining and reflecting:**
> *-I have spent my best years in Primary school, I had a great time here. None wants to leave this place…*
> *-Primary school has been a kind of prison for me, I am glad I am leaving!*
> *-I feel anxiety in view of Secondary School…*
> *-I feel I am growing up and I want to show it to the younger students*
> *-We have had a close relationship with our teachers here.*
> From students' interviews

Spaces for conversation and discussion: The dialogic and participatory processes are examined in the "affordances" section.

6 RESOURCES: Various resources were utilized, including both tangible and intangible products.

Objects used on stage for setting (furniture, a magazine, a phone device, photos)
Tools (laptop, camera, pen, paper)
Software (Word, Paint, PhotoStage Slideshow Producer-NCH Software)
Internet (You Tube, SoundBible.com)

Broadly speaking, "what makes something a resource is a matter of perception and my ability to utilize it. Resources help me learn and achieve my goals"[2,3]. Therefore I would supplement the resources outlined above with:

Teacher's knowledge - expertise in video editing and creative writing
Children's experiences, fantasy, vivid participation providing material and creative force

Through the ecology new resources were brought into existence for example the video and existing resources were modified/adapted (recreated) eg the script.

7 PROCESS: The process for this learning ecology included all the activities undertaken by participants to achieve the goals both inside and outside the classroom. This process was partly orchestrated by me the teacher but also by the learners themselves as they engaged in their own self-determined activities.

How I perceived my role as a teacher

As the teacher it was my role to create and animate the process through which learning was brought to life. I visualized myself as an orchestrator who guided each student to play their part at the right time, with their own

instrument (their talents) and in their own interpretations and style. By encouraging collaboration and interaction I wanted the whole experience and performance to be much more than the sum of the individual.

This particular pedagogic practice resembles composing music in that the improvisation is the cornerstone of playing. Some come up with basic themes or give forms/structures as starting points for further development by others. I too the initiative for most of the time, yet the roles were interchangeable.

My primary role was to inspire, to stay tuned in (sense the circumstances) and set the tone. I attempted to ensure the rehearsals would run smoothly, so that the aesthetic impact would communicate the social, emotional and intellectual spaces of all participants (musicians, orchestrator and audience). I was trying to facilitate organized cooperation and diversity so that individuals voices combined in a unique pluralistic way. Obviously, the analogies used indicate the relation between each individual and the "collective whole person" of our ecology.

As the teacher I had a plan relating to time, place, use of materials and making things, and the coordination of activities and actions. In order to work effectively, I would choose the time devoted to the project taking into account children's feedback and needs to decide "When" and "How long".

For example, the way rehearsals were held. At some stages, young actors/actresses of every scene were rehearsing separately (in different places at the same time) to refine their dialogue, before sub-teams go back together to make a general rehearsal. Processes resulted from practical reasons and provided an organized plan/frame for free expression. That kept a balance, to ensure that the messiness of creative work wouldn't lead to disorganization and frustration.

Making (the video) was an important activity within the (process) and resulted in a product (creative outcome and new resource) from the learning ecology. The core concept was to create a digital story to show the development of the children throughout their school years. En route we opened the age range, starting from earlier ages to show moments of their childhood as they were reaching adolescence. A series of photos and slides were used, but the feedback pointed to the need for some extensions to our digital narratives by this I mean ideas that emerged that prolonged the duration of the video and enriched the main idea with the inclusion of more scenes (Figure 5).

Figure 5 Stages in the development of the digital storytelling
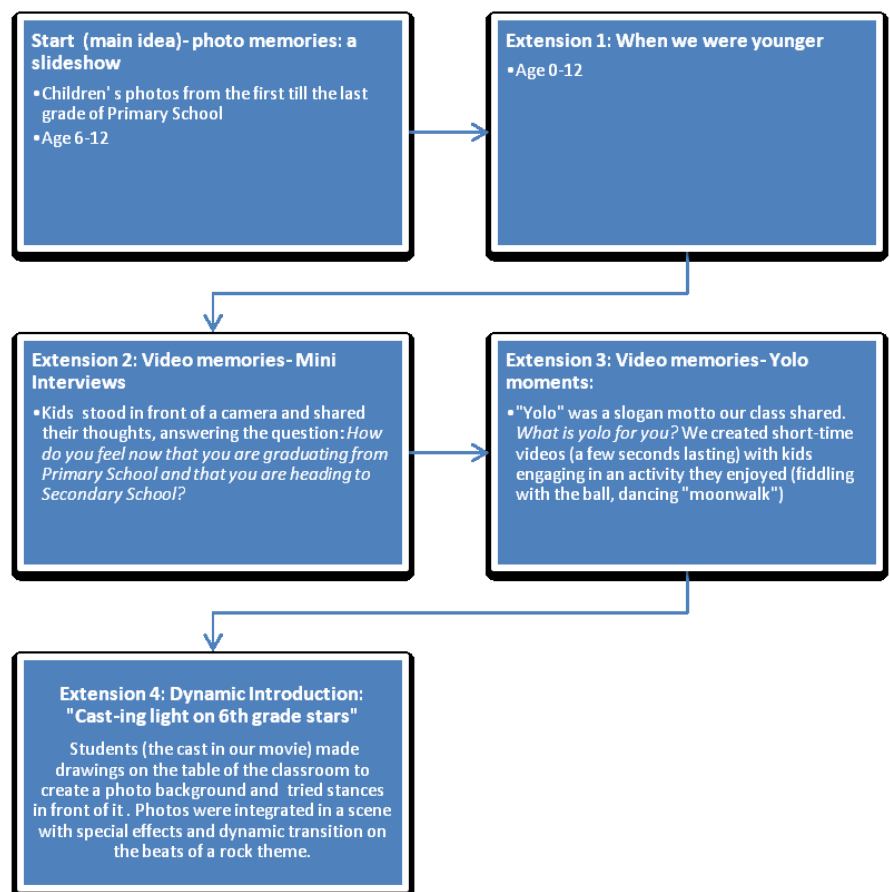
The openness of the process was partly for practical reasons and partly because new ideas emerged as the process was unfolding. For example, we decided that some kids did not have enough/ appropriate photos for the period of time while they were at school. This led to the idea that we could

broaden the scope of the album and eventually to a digital album capturing moments from baby poses to near-adolescent faces.

Many questions were made during the making of the video to be answered in the discussion spaces (Figure 6) eg.

Which is the best musical background?

Some students preferred a happy song while others a nostalgic melody. Finally, we integrated both according to the atmosphere we wanted to create. A cheerful song for "Yolo moments" unit and a nostalgic for the photo memories (0-12).

Every extension (or scene) *is a separate unit in the video. Which is the best order?*

It was agreed that Extension 4 would be ideal for the introduction.

Figure 6 Discussions spaces where ideas were formed, shared and developed

8 ACHIEVEMENTS & RECOGNITION OF CREATIVITY : When it comes to creative pedagogy, evaluation can become a controversial issue. It is the nature of creativity that makes summative assessment (as it has been traditionally conceptualized in terms of standardized tests and scores) appear contradictory to the freedom of expression, subjectivity and individualized interpretations and responses we encourage for creativity. The uniqueness of individuals' creativity is compromised by the educational desire for conformance and standardisation.

However, if we look at assessment as a formative process, it was happening all the time, since we made improvements and adaptations all the way through the process. The learning outcomes concerning theater production and performance and the creative and productive use of technologies in education demonstrate learners' achievements,which was also confirmed by the positive feedback, praises and applause from the audience. Therefore, we talk about an achievement personally experienced by the individuals, with pleasure and satisfaction stemming from their creativity at the heart of it.

Epilogue: A circle of reflection

As my thoughts come to a closure, I would like to reflect on the act of writing this article, which made me systematize my memories from this teaching practice and examine my experience through the lens of a learning ecology.

I find it interesting and helpful to immerse my readings and practical experiences in various theoretical schemes. I am inclined to believe that this process causes fruitful comparisons and correlations, "creative repetitions" and revisions, change in focus etc. all resulting in profoundly effective learning about the areas we are interested in. It may be true that many observations, concepts, values, paradoxes, inferences are pretty similar and re-appear with different faces as they dance in the rhythm of New Pedagogy and progressive educational discourses. That does not decrease, to me, the value of the discussion conducted on theory, as long as the dialogue is viably maintained.

I suppose that questions of this type are naturally to be expected due to the fact that the ecology model constitutes a holistic approach where all elements are associated. What I mean is that many thoughts seemed to be "between and betwixt" different components and components commonly overlap one another-they are intrinsically interacted and correlated in the ecosystem of pedagogy, ultimately being part of the ecosystem of society. Still, we should keep on devising functional models to encourage reflection and thinking and to provide a solid basis for this to happen.

It is essential that we adopt a broad perspective when addressing the topic of creative pedagogy. Creativity may be triggered by witty strategies and sets of popular useful techniques, but these tools themselves will not prove effective unless emotional, psychological and practical circumstances allow it.

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Colour me a red
white blue black pink
yellow green and brown
Xmas ...

#creative season greetings

In this section we are publishing two more articles that were
created through the #creativeHE on-line discussion which took
place in early November 2016

Editor: Early in November I attended the ICOLACE4 conference in Singapore and was inspired by a young man called Arcie Mallori who spoke about the educational work of Silid Aralan who try to transform the lives of poor, disadvantaged young people who are failing at school in the Philippines. I invited him to join the Lifewide Education and Creative Academic communities which he did, and he contributed this post to the #creatIveHE conversation together with a link to an inspiring story told by Carlos, who Arcie and his colleagues had helped to transform his life. I wanted to know more about the pedagogic practices that led to this remarkable transformation so he kindly describes his approach in the following article.

You can view the talk given by Carlos using these links
https://www.youtube.com/watch?v=Up-Qr5Daz_U
https://www.youtube.com/watch?v=VaQIF_4FUw4
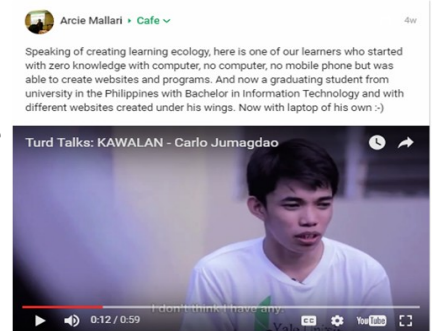
Pedagogy for Personal Transformation & Creativity
Arcie Mallari

Arcie is a champion for social change and a visionary for beyond classroom approaches to learning personal development and scholastic transformation. Exposed to the poor living conditions as a resident in one of the dumpsites in Payatas, he met children with dreams of growing up as a housemaid. Through such stories he was inspired to develop a vision of developing unique educational programs was born — a vision that will help them realize their true ambitions and discover a world far bigger than what they know. With his team of volunteers he has turned his imagination into Silid Aralan Incorporated (SAI), a non-government organization for community-based projects that are focused on learner empowerment. SAI's mission is to "be co-learners of children by facilitating the discovery of their life's purpose and love

for learning that will inspire and empower them in creating socially responsible I innovations." Through SAI, Arcie and his team of volunteers were able to inspire change to thousands of underprivileged and academically-challenged students who are now academic achievers and leaders in the community – not through typical armchair tutorials – but by reinforcing the students' confidence in their own capabilities. SAI is expanding across the Philippines training around 5,000 students and mobilizing more than 1,000 parent-volunteers who share Arcie's vision of Silid Aralan as a platform for personal development, creativity and achievement.

Introduction

Silid Aralan Inc. (SAI) was founded on April 12, 2007 by Arcie G. Mallari, Russell Q. Angeles, and Marc Licaros to provide new opportunities for learning and strengthen the educational services for under privileged public school students in Rodriguez (Montalban), Rizal in the Philippines.

Silid Aralan is an afterschool tutoring and supplementary educational program that caters for underprivileged and academically-challenged school children and youth. SAI inspires and helps children and youth develop their passion for learning and then teaches them how to learn. The children are taught outside of class hours through creative methods that appropriate lessons to activities that students enjoy and can relate to.

SAI also provides training for parents, teachers and student volunteers. There is also supplementary training for non-readers, low performing students, and students with low self-esteem. (http://orgs.tigweb.org/silid-aralan-inc).

A key part of the SAI philosophy and practice is that teachers and students are engaged in a collaborative co-created enterprise for learning. This means that teachers reveal their own learning process for students to see.

Ground Zero

Ground Zero is the entry-level program of Silid Aralan, Inc.

**iLEAD**

iLEAD is the flagship program of Silid Aralan, Inc.

LEAP

LEAP is an extension program for Silid Aralan, Inc. alumni (grade 11-onwards)

Pedagogic Approach

We call our approach 'The Silid Aralan Learning Technology (SALTEd©). We represent and explain what we do using the metaphor of a wheel (Figure1).

Figure 1 The Silid Aralan Learning Technology or SALTEd© can be pictured as a wheel of a cart.

It model we use has three components: the outer rim, the hub and the spokes.

The outer rim. This is the part of the wheel that meets the road of life. It represents the process by which each learner discovers his or her potentials, strengthens their life's purposes and develops the love for learning.

The hub. This is the part of the wheel from which the power emanates to the rim. It holds the wheel together. The hub symbolizes the core values that are at

The spokes. These transmit the strength and direction from the hub to the rim. The spokes are the means of developing life-long and life-wide learners. Each spoke has a purpose and there are five Spokes of Learning Learners are escorted and supported through a process represented in figure 2 and described below.

Figure 2 SAI pedagogic process

1st Spoke -Motivate - find your passion
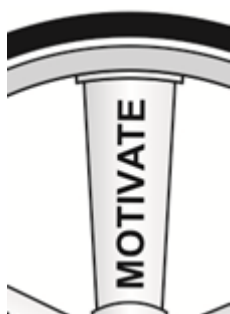
The first spoke seeks to prepare learners for optimum learning by arousing their *passion for learning*. This motivation takes root in our belief that we are all smart. The Multiple Intelligence Theory of Howard Gardner, simply stated, is that there are many ways to be smart. There are multiple intelligences. The implication of this simple idea is that when a learner recognizes that each of us is smart in many different ways and we have different things we want to be smart about - the things we care about and value, we can transform the way our learners think of themselves.

As each learner discovers the ways in which they are smart they are motivated to learn more. We have discovered that learners' ability and willingness to use the intelligences they have come to recognise and apply them to things they are interested in eventually extends to the rest of their learning enterprise and makes them eager and open to learning more and other things. However, before optimum learning can be achieved, there are often barriers that need to be overcome. We call these walls "Learning Blocks".

"There Is No Greater Thing You Can Do With Your Life And Your Work Than Follow Your Passions In A Way That Serves The World And You..."

Sir Richard Branson
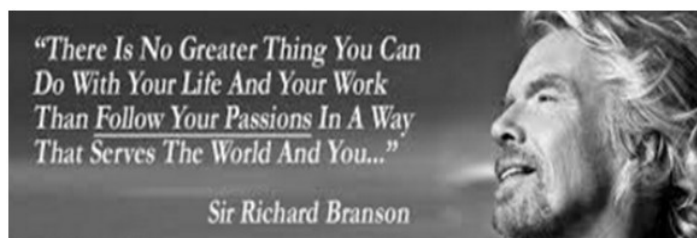
Learning Blocks

A "Learning Block" is the paradigm (set of beliefs) used by an individual which inhibits their ability to learn and excel. This perceived reality stems from a negative experience which the learner had gone through or witnessed.

For most of our learners, their learning blocks are the result of their poor standing in school. They have been defined by their low grades as *dumb* and sadly, their parents often reinforce this belief.

At the beginning of their Silid Aralan learning experience, most of our learners can't even see themselves being educated beyond elementary school. However, with the SALTEd approach, learners begin to see that they are really smart in more ways than one. Gradually they begin to change their perception of themselves and their beliefs about what they are capable of achieving. They will become free of the burden of being called *dumb*. With their learning blocks removed, their passion to learn becomes more

As educators, Silid Aralan 'teachers' face their own learning blocks when they "teach", instead of "learn" with their learners. As teachers we must also be co-learners and this is sometimes hard to take on. A teachers attitude and approach should be that of a co-learner in the group. With this learning block removed, the CoLe will be ready to share of himself/herself, particularly of things that he/she is personally passionate about.

Having removed their learning blocks, learners will be free to pursue their passion. Their enthusiasm will be boundless. If their passion is in painting, they are free to paint! If their passion is song-writing, they are free to write a song! If their passion is education, they are free to educate themselves and others who are willing to do the same!

2nd Spoke: Escalate - passion + self-knowledge

The second spoke of learning seeks to increase the knowledge of the learner. Armed with the passion to acquire new knowledge, learners are now ready to listen, to learn and to unlearn.

Unlearning : Learning blocks encourage negative beliefs towards learning. For example, the "I am not smart" Learning Block results in an attitude of indifference or even avoidance to learning:

! "Why should I listen to my teacher? I'm not going to understand anything she says anyway."

! "Why should I study for tomorrow's quiz? I'm going to fail anyway."

! "I don't need to know this. I'm not going to need this in my future as a housemaid."

This indifference will prevent learners from furthering what they know and will potentially become stagnant in this aspect of their lives. What the learners have to understand is that their definition of "not smart" is merely an interpretation of a past experience that they have gone through or witnessed personally. For learners to unlearn such negative beliefs and attitudes they must undergo the 3A's of unlearning

> **3 A's of Unlearning**:
> **A1**. Acknowledge you have a learning block.
> **A2**. Accept your past.
> **A3**. Acton it.

Acknowledge you have a learning block. Acknowleding that you have a learning block is as easy as crashing through a 5-inch thick cement wall. Your learning block could actually already be a "comfort zone" for you and you may be sitting on top of it like a royalty of failure. How can you identify a learning block? One sure fire way of recognizing a learning block is when you are presented with an opportunity to learn and the first thing that comes out of your mouth is "I can't". Or even if you don't verbalize your "I can't" but negative feelings and attitudes become manifest, then there is a resistance to learn – a wall is definitely blocking your way.

What you have to understand as a learner is that there is something that happened in your past which you allowed to define your "I can't". Look back and determine what this was.

Accept your past. Negative learning situations from the past should remain in the past. We should not allow our past to define our future.

Act on it. Having acknowledged our learning block and accepted the situation that caused this block, the only way to go is to move forward in acquiring new knowledge. Moving forward and making progress helps the learner develop their confidence and self-belief.

With the 3 A's of Un/Learning, our learners will become open to absorbing old things but with a new, more positive psychological orietntation. With this attitude every experience becomes an exciting opportunity for learning. In other words the pedagogic process tries to change how learners perceive themselves and their world and the way they might and can act in the world. Such changes in perception expands learners' affordances - their opportunities for action and their willingness to act on these affordances.

3rd Spoke: Create - passion + knowledge = creating new possibilities

The third spoke of our pedagogic approach is inspired by personal breakthroughs. When learners have broken through their learning blocks and begin acquiring knowledge, they expand their affordances and the possibilities that they can create are endless.

Inevitably this leads to the "Aha! Moment"

An "Aha! Moment" is an opportunity that was once thought of as impossible. With this "Aha! Moment" everything becomes possible - learners realise that they can achieve things they never even dared to dream of.

4th Spoke: Integrate - passion + knowledge to create possibilities and create value in their community

The integrate spoke of learning gives learners a sense of value as they choose to contribute something good to their community. It is the giving back of what they have learned in a way that is relevant and useful to their community.

Empowerment is manifest when learners give something back because they care passionately, not because they are told to, but because they willingly choose to do so. Also, the choice of what to give back is theirs - their gift is their decision and its is their own judgment about what is useful and valuable based on their deep understandings of and relationship with their context.

So our pedagogic process leads the learner to the self-awareness that whatever circumstance they are in, it is their choice to live an empowered life. The source of their empowerment comes from within. Since they have become empowered, they are now ready to help empower others. As learners act their part in their community, big or small, there is a realization that they play a small but significant part in the whole picture of things. Put another way, they are a tangible and useful part of the ecosystem that their community comprises and their actions can have a positive impact on this ecosystem.

Over time, as they continually give back to their community, they realize that they are realising or serving their life's purpose and chances the chances they have or create.

5th Spoke: celebrate

The fifth spoke of learning celebrates the greatness of each learner. The breakthroughs of each learner is honoured as they own the steps they have taken towards discovering and serving their purpose. In this spoke, our own mission to support learners' love for learning is achieved with the learner's self-acceptance of her uniqueness

Disseminate

Perhaps there is another spoke in our pedagogic model which is to try and influence young people beyond the people we actually teach. One of the ways we achieve this is through our celebrations which we film and brand as our TURD talks which emulate the well known TED Talks and in the same way as TED the stories told by the students - empowered learners, of Silid Aralan Inc are intended to inspire others.

(Definition of "TURD": no good, piece of sh*t no one wants to touch.)

For just an initial outlay of $500 the TURD talks helped raise $187,000 to support the charity. You can listed to some of these transformed and creative speakers by following these links

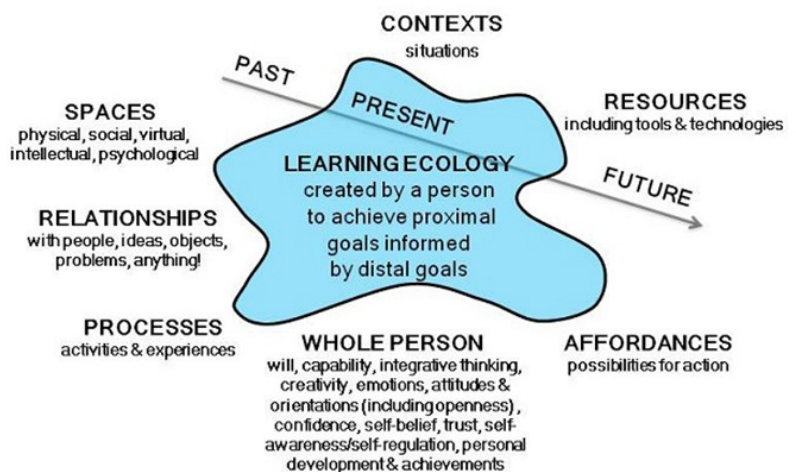https://www.youtube.com/watch?v=7td7sn-cK8Q

Commisisoning Editor:

Silid Aralan Inc's pedagogy for personal transformation and creativity can be related to the ecological model we are exploring (Figure 1). **Figure 1** The model of a learning ecology we are exploring.

It seems to me that what they are trying to do is enable and empower learners to create entirely new ecologies for learning and creativity in the everyday contexts and situations they inhabit. Teachers as co-learners in a co-created ecology for transformative learning, accept that learners bring with them a past history that leads them to think that they are failures and poor at learning and cannot make a useful contribution to the world. Through their actions and interactions teachers set about changing this set of negative beliefs so that learners begin to see themselves and their place in the world more positively and as the uniquely talented people they are who can act in their world to make a positive difference.

Their pedagogic strategy help learners express their passions for what they care about and value and use this to discover purposes that they want to serve. They teach students to inspire and motivate themselves and to make their decisions about what to act on. In the words of the ecological model they discover affordance or potential for action and they act on it. The ecologies they build are ecologies for creating and achieving what they care about and value - they will inevitably involve all the elements of the framework shown in Figure 1 (it would be great to test this through some example stories) and the successes they have build their confidence and self-esteem so that they are empowered to engage with learning in other contexts and circumstances. In this way their reconfigured learning ecology provides a model for them to replicate in future learning projects. In this way it has transformed their ability to learn throughout their life.

Norman Jackson

On stunted growth, weeds, invasive species, parasites and pollution & the ecology of creativity

Teryl Cartwright

Teryl works at The United Methodist Stewardship Foundation, helping to provide stewardship training to the member churches and affiliates of the Susquehanna Conference in central Pennsylvania. She is freelance writer of curriculum, fiction, and drama as well as an online course developer and facilitator for the Institute for Discipleship. She is a regular contributor to Creative Academic Magazine and community discussions including the November #creativeHE conversation.

> *"Gardening is my favourite hobby, and I always learn something useful in the garden! Some time ago I had a large tree taken down. Quite soon, I got an entire forest of raspberry bushes instead. Why?, I thought. It would have been space enough for the raspberries next to the tree. Sure, but the tree took up all the light - all of a sudden, there was sufficient light for other things to grow. On the same note, I've noticed that even dead branches creates shadows that blocks light for the living plants."*
> *Christina Kobb, personal correspondence, December 2016*

How much fun and wisdom is there in that potential description of an evolving learning ecology! While the problem might be how much is "lost in translation" between our different contexts and use of these shared insights, this gap is also a key to creativity. Whether we choose to reach out to understand from another perspective, balance ideas with our own, or unlock something new from both the connections and the disconnections, somehow we build on things we aren't even sure are there.

The Sapir-Whorf hypothesis tackles the connection between our language and thoughts and how we are shaped by our particular language even if most people are born with the capacity to learn any. Communication and the symbolic representations with their rules, limitations,
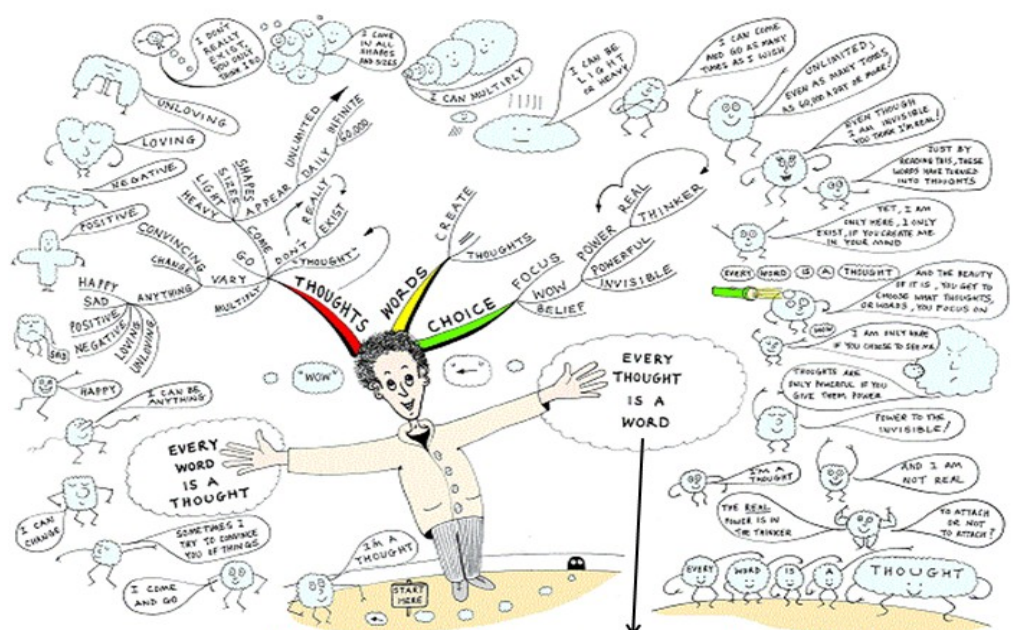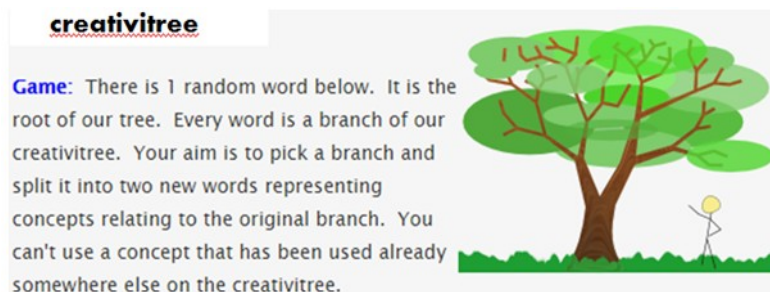

If it isn't, I have to invent a new word and give it meaning

and nuances affect creativity as well. While our particular language may influence the ways we view and practice creativity, it's the imperfect gaps of interpretation that leave room for so much diversity in the understanding of it.

Notice how many creative thinking exercises involve using synonyms, antonyms, and crontonyms to create and express new ideas. There's a big difference, for example, when you start to 'dig' for ideas if you are mining them or cultivating them. You 'pin down an idea' differently if you are wrestling with it or collecting it. The landscape really changes though if I suggest that creative thinking is convergent by bringing many ideas to one object and critical thinking is divergent by dissecting and tearing apart one object into many ideas.

This re-evaluation and unlearning of my preferred learning ecology has caused me to question the things I've left out of my mental landscape due to my lack of comfort or understanding. Even if I look to nature as inspiration to make a creative environment for myself or others, I still don't try to plant things with stunted growth, invite invasive species in, appreciate overgrown weeds, accept parasites, or allow any kind of pollution. I suspect that a lot of creative thinkers are like me, because there is a whole branch in the "creativitree" devoted to theories of the conditions for optimal creativity and the corresponding practices to remove any creative blocks and ruts. One of our blind spots in a creative ecology might be the refusal or inability to interact with the undesired or unusable, whether an overlarge tree, a forest of briars, or shadows of something long gone.

creativitree

Game: There is 1 random word below. It is the root of our tree. Every word is a branch of our creativitree. Your aim is to pick a branch and split it into two new words representing concepts relating to the original branch. You can't use a concept that has been used already somewhere else on the creativitree.

This made me think about how much we try to control learning even if we don't fully understand the catalysts or measurements of it. We design our learning ecosystems and relationships much like we try to control nature in our landscaping and cultivation. Our best efforts cannot guarantee success, yet we believe more understanding will at least get us better odds. Creativity also requires nurturing our emotional growth during challenges, ensuring that the uncomfortable parts of our learning ecologies need to have their place. As I tamp down the ideas planted here I'm curious – what unexpected things are you cultivating and growing in your space this winter?

On Stunted Growth, Weeds, Invasive Species, Parasites, and Pollution

Here are a few short story starters from an "art class" that offer some ways to tease out different creative teaching ideas. If you change a few words in each story, these learning ecologies can easily become science or math classes.

"Still Life" – The student inexplicably halved the objects she was to draw, one side skewed higher than the other, creating a picture that was totally different from the rest. Her excited teacher lavished praise and an "A" on her for the first time. When her next drawing looked so very inexplicably ordinary though, he promptly lost interest, moving on to praise more promising students.

"Call it a Draw" – Two friends worked on their projects, but the one finished first because the other kept starting over and over. When she asked for his help, the first friend shared careful words of encouragement since he could see how close she was to giving up, even though wobbly lines can be just as beautiful as straight. All his energy went to her finishing and she did, even winning a prize, yet he didn't understand why she wasn't his friend anymore.

"Cut and Paste" – The teacher and student both knew he was creative even if only one of them believed it. When he turned in the artwork that wasn't his own, she had to decide what to do, knowing it was her teachable moment. Neither of them realized until later that what happened next would be the turning point in creative thinking for them both.

"Teacher on a Tightrope" – She wouldn't draw anything else, just day after day horses, no matter what the teacher assigned because she didn't think creativity was doing something new, it was doing something better. Even when the teacher stapled the similar drawings together to make a flipbook, there was no movement. The lines were drawn and they both wanted to know where they could go to be true to their work.

Acknowledgement

Lessons learned from playground pedagogy

Joseph S Renzulli

Dr.Joseph Renzulli is a leader and pioneer in gifted education and applying the pedagogy of gifted education teaching strategies to all students. The American Psychological Association named him among the 25 most influential psychologists in the world. He is Director of the University of Connecticut's Neag Centre for Gifted Education and Talent Development and Distinguished Professor Raymond and Lynn Neag Professor of Gifted Education and Talent Development

> *Small children want to learn to the degree that they are unable to distinguish learning from fun. They keep this attitude until we adults convince them that learning is not fun.Glenn Doman*

Sometimes, the most important lessons about learning are right before our eyes, but because they are not considered "real school," we tend to overlook them in favour of the highly organized and prescriptive pedagogy that characterizes formal learning. Observe a group of young people at play or those engaged in an extracurricular activity. The first thing we note is that young people group themselves across age lines according to their interests. Some kids are throwing a ball through a hoop while others are swinging a bat at a much smaller ball. Some youngsters with an interest in the written word are gathered around a table doing what needs to be done to get out the school newspaper or yearbook, while others are building scenery and working on the light and sound systems for a forthcoming drama production. And even within groups, natural divisions of labour take place so that someone ends up pitching the ball, while other develop their skills as infielders or outfielders. In the school newspaper group, there are writers of many genres, layout and production specialists, and others who are interested in management, marketing, and desktop publishing.

A second characteristic of what I call playground pedagogy is that everything is directed toward the production of a specific product or a real and present goal that is highly relevant for the entire group. [Like scoring a goal in a football match].

Compare this type of learning with the often distant and ambiguous goals that typify classrooms dominated by lesson plans, prescribed standards, and preparation for yet another test. I am not arguing against the important role of formal learning situations. However, these prescribed and presented learning experiences need to be counterbalanced with learning that is based on student interests and a pedagogy that makes whatever students are doing instantaneously relevant to their own interests, motivation, and desire to produce something that is important to them!

But there is a third characteristic of playground pedagogy that should be infused into at least some of our formal learning situations if we are to improve the efficiency of learning. This characteristic, pure and simple, is enjoyment! Whenever people ask me to define what I mean by enrichment or high end learning, I always answer with what I call the three E's'—enjoyment, engagement, and enthusiasm. And enjoyment leads the list. While one would be naive to argue that all learning (or our jobs and work) can always be enjoyable, efficiency in school or the workplace is always heightened when students or adults enjoy what they are doing.

"The Creative Button Boutique": playground pedagogy in school education

A couple of months ago I visited with a group of elementary grade children who were enrolled in an enrichment cluster that designs, "manufactures," and markets colourful buttons. An enrichment cluster is an across grade level group that comes together during specially designated time blocks because of common interests and a willingness to work together for the express purpose of producing a product or service. The clusters are modelled on real world enterprises such as businesses, advocacy groups, research institutes, literary societies, or artistic production companies. *There are no lesson plans or lists of standards to follow, but many types of powerful learning take place within the context of producing the product or developing the service.* All activity is directed toward having an impact on an intended audience. Students seek out information and resources on a need-to-know basis, and they use the methods of practicing professionals, even if their activities are on a more junior level than adult professionals. The teacher serves as a *guide-on-the-side* rather than an instructor—gently helping students to escalate their work to as high a level as possible for their age and maturity levels.

The day I visited the "Creative Button Boutique" the room was a beehive of activity. Divisions of labour were readily apparent–some students were experimenting with colours, designs, and digital photography while others were calculating the sale price of buttons based on the costs of materials. Still others were preparing advertisements by designing posters and rehearsing oral presentations for the school's public address and closed circuit television system

The business committee was searching for information on the Internet about quality control and there was talk of a web site for their company and the possibility of having a booth at a forthcoming town fair. "Will Mr. Sampson (the technology teacher) help us set up a web site?" "Do you have to pay for a web site?" "Who do we need to contact to get a booth at the town fair?" "How can we find out if they charge for booths?"

"Should we write a letter to the Chamber of Commerce?" The most obvious thing I observed was that everyone was having fun! The excitement and enthusiasm were contagious because the students were all working on problems that were real to them; they were eager to do whatever was necessary to make their products creative and their business a success. The atmosphere reminded me of the kinds of enjoyment and engagement that can be observed almost every day on the playground! And yet, these young people were engaged in very meaningful learning that represents a practical blend of cognitive, affective, and motivational growth.

As the time period for the enrichment cluster drew to a close, the manager of the Creative Button Boutique decided to give me a gift of one of their products. He presented me with a choice of several buttons, and made it clear that they could only afford to give me one button. At that moment I saw a glow in the young man's eyes that suddenly reminded me of what learning was all about—competence, pride, satisfaction, achievement, and most of all enjoyment. All of the goals of schooling are more easily and effectively accomplished when young people are doing in "real school" what they do so easily and naturally on the playground.

Acknowledgements
Article published at http://gifted.uconn.edu/schoolwide-enrichment-model/playpeda/

Playground image credits : Outdoors the ultimate playground booklet available at:
https://www.healthunit.com/outdoors-the-ultimate-playground

"The Creative Button Boutique" Kibiko Hachiyon

Facilitating Intrinsic Motivation:
Six C's of Motivation that Encourage Creativity

As a guide-on-the-side perhaps the most important thing the teacher does is establish a space and climate within which self-motivated, self-organised and self-determined enterprising activity could flourish. The six C's of motivation[1,2] : choice, challenge, control (autonomy), collaboration, constructing meaning, and consequences (recognition) have the potential to encourage students' intrinsic motivation when applied to open-ended tasks such as the Creative Button Boutique described above. There is no single correct answer in an open-ended task, allowing students to make their own choices and determined their own goals. In the open-ended task context, teachers guide students in selecting the most appropriate choices, setting up short- and long-term goals, planning and evaluating their projects, work-ing collaboratively, constructing personal meaning through the task, and displaying their final projects.

CHOICE

CHALLENGE

CONTROL

COLLABORATION

CONSTRUCTING MEANING

CONSEQUENCES

Sources
1 Turner, J., & Paris, S. G. (1995). How literacy tasks influence children's motivation for literacy. The Reading Teacher, 48(8), 662-673.
2 Wang, S. & Han, S. (2001). Six C's of Motivation. In M. Orey (Ed.), Emerg-ing perspectives on learning, teaching, and technology. http://epltt.coe.uga.edu/

#creativeHE Creativity Course

January 16-20 2017

#creativeHE creativity courses were invented by Creative Academic co-founder Chrissi Nerantzi. They provide opportunities to explore what creativity means in different teaching and learning contexts and to develop new ideas and practices to encourage and facilitate students' creative development. They are free and are a great way to engage in social learning with other people who care about creativity and students' creative development.

FLEX 15/30 Creativity for Learning 2016/17 : join us! @ #creativeHE

This unit provides participants with a flexible, practice-based approach to teaching practice enhancement. A special version of FLEX with a focus on creativity will be offered by CELT in collaboration with London Metropolitan University during 2016/17. Colleagues from both institutions and elsewhere will have the opportunity to learn and develop together within a diverse and distributed community of higher education practitioners who are involved in teaching, supporting learning or development of others with an interest in creative teaching and learning, who would like to explore innovative learning and teaching.

Within this unit, enablers and barriers to creativity in higher education will be explored together with related pedagogical theory and literature. Participants will experience learning through play, games, models and stories and actively experiment with such approaches. This will help participants to further develop their understanding, knowledge, skills and practices in these areas and become more adventurous in their teaching. Participants will be able to critically reflect on their practice and identify opportunities to design, implement and evaluate an imaginative and creative innovation that fosters curiosity, maximises motivation and meaningful active engagement and discovery learning. The teacher is challenged to be creative in order for creativity to be developed in the students.

The unit is offered online as a 5-day block using the Playground model (Nerantzi, 2015) with further support until the end of the term.

The course will be offered twice in 2016/17
16 – 20 January 17
22- 26 May 17

Structure
Day 1: Introduction to creativity in HE, enablers and barriers, theory and practice
Day 2: Learning through play and making
Day 3: Using story for learning and teaching
Day 4 : Learning through making
Day 5: Sharing learning and next steps

Whilst these individual activities are to be assessed holistically through one mode of summative assessment, it is important that the activities are understood and reflected upon individually to ensure successful synthesis and incorporation into practice as they are experienced.

The summative assessment consists of a reflective narrative aligned with the UK/MMU Professional Standards Framework (MMU PSF), institutional drivers (such as the Strategy for Learning, Teaching and Assessment for example within MMU) where applicable and evidence of engagement and impact of specific FLEX CPD activities on teaching practice.

To find out more, and to register for this free open course, visit
https://courses.p2pu.org/en/courses/2615/creativity-for-learning-in-higher-education/

Inquiry into the Motivational Forces for Creativity

Motivation, particularly self-motivation, is a necessary force to enable us to achieve creative outcomes. One of the inquiries we are making in our Creative Pedagogies project is to explore how higher education teachers, through their pedagogic practices, encourage learners to harness their own intrinsic motivations for creative work.

Q What are the motivational forces developed within a particular teaching-learning context that encourage students to use and develop their creativity? We are particularly interested in teachers' narratives of their own experiences of encouraging learners to be creative.

Trigger paper
We are using a short article 'Six C's of Motivation' by Shiang-Kwei Wang and Seungyeon[1] Han as our exploration trigger.

We welcome contributions to Creative Academic Magazine (CAM7) on this theme and posts to #creativeHE
https://plus.google.com/communities/110898703741307769041

Six C's of Motivation

Shiang Kwei Wang and Seungyeon Han

Ames[1] and Lepper and Hodell[2] suggest some strategies to increase students' classroom motivation. Turner and Paris[3] term these the Six C's of Motivation: choice, challenge, control, collaboration, constructing meaning, and consequences. As we apply the Six C's of Motivation to instructional design it is important to remember that these strategies are extremely flexible and can be modified and adapted as needed.

Teaching & Learning Scenario

It is useful to examine these strategies *to motivate learners* in an educational context. In a tenth grade geography classroom, Ms. Betty assigned a group project to her students. The goal of this assignment was for students to learn the geographic location and some key information about east Asian countries. After Ms. Betty described the group assignment, students formed five teams of three students each. Each team chose one of the Asian nations and wrote a five-minute news release about it. The students were to act as anchors of a news show to introduce their country to the audience. The goal of the news report was to help students learn general information about the featured country.

In the initial phase of this assignment, Ms. Betty gave the students the opportunity to choose their team partners, create their project timeline, design their content outline, and assign duties to each team member. She told the students to take responsibility for their own products and she would assist as facilitator and coach. However, Ms. Betty still spent time reviewing the groups' plans for potential problems. She also provided some television news clips for students and provided guidelines for writing a good news report.

Ms. Betty also discussed the project with each group before they started. She asked questions to determine their goals, such as:
What do you expect to learn from this assignment?
Why did you choose this country?
Why did you select these perspectives to do the introduction?
What personal skills do you want to contribute to the project?

Once Ms. Betty understood her students' goals and expectations of the project, she made sure that their progress matched their original plan as she met with them weekly throughout the process. During their weekly appointments students reported on their progress. Ms Betty provided feedback as needed and helped the students find ways of applying their skills and talents to the project. Finally, Ms. Betty asked each student to write a

short paper to report his/her reflections about the project. She wanted the students to focus on any gaps between their original expectations and the final results as well as to find out what the students learned from the project. She used these notes to revise her instructional strategies for the next semester.

The following section provides some elaboration on each of the six strategies used in this example.

Choice

Malone and Lepper[4] suggest that providing explicit choices among alternatives can enhance intrinsic motivation. Schiefele[5] identified two components of interest: feeling-related and value-related valences. Feeling-related valences are feelings attached to a topic. Value-related valences relate to the importance of the topic to an individual. Value-related valences are associated with "constructing meaning" and are discussed later in this chapter. Feeling-related valences are the degree of enjoyment that an individual has toward a topic or object. If students are allowed to select a tasks that they personally enjoy doing, their motivation to learn increases.

When students are given choices to select assignments that are close to their personal interests, their motivation to do the work should increase. Ms. Betty allowed students to select the country that their group project would focus on. She gave them this choice hoping that the students would take responsibility for the assignment because it corresponded with their interests. For instance, Group A chose to introduce Japan because they liked to watch Japanese cartoons. Group B selected Taiwan because they had recently viewed a movie produced in Taiwan and were curious about the background of the movie. These feeling-related valences can be factors that enhance the motivation of learning.

Challenge

Providing or operating tasks just beyond the skill level of the students is a good approach to challenge learners. In the motivation chapter, the Flow Theory[6] is presented. Students may experience flow if the challenge of assignments matches their skills. Work that is too difficult raises anxiety, whereas tasks that are too easy contribute to boredom; both situations decrease motivation toward learning. In order to ensure that goals remain challenging, teachers should continue giving students the opportunity to provide feedback. Helping students search for more information to improve and revise their tasks plays an integral part in the learning process.

In the geography classroom, students edited the news release and produced the final product. When Ms. Betty saw Group A's first draft about Japan, she suggested they include more information about natural resources and less about travel attractions. Ms. Betty suggested that the group consider their audience and imagine what information they would expect to get from the news clip if they were the audience. The second draft was an improvement, but Ms. Betty still suggested including more information on natural resources to insure a balanced report. Continuously providing proximal goals can enhance students' self-efficacy and sustain motivation toward learning.

Control (autonomy)

If students are involved in the process of classroom control, they will be more responsible, independent, and self-regulated learners. To share the classroom control with students means involving them in the process of decision-making, organization of content, and choosing team members. However, too many choices may lead to increased anxiety, so providing assistance at appropriate times is essential when the teacher shares the classroom control with students.

In the geography class, Group C had a problem assigning roles to each student and asked for help from Ms. Betty. She then explained the roles of editor, information retriever, and anchor to the students until each had selected an appropriate role through negotiation. Ms. Betty placed no restrictions on content, allowing students to choose to introduce their countries from their own perspectives. Ms. Betty simply provided objective suggestions when she found problems.

Collaboration

Vygotsky[7] theorized that communication and collaborative group work can enhance individuals' thinking and learning. Students can share learning strategies and perspectives with each other through social interaction. Collaboration seems to work best when students depend on each other to reach a desired goal, when there are rewards for group performance, and when students know how to work together effectively[8].

Ms. Betty assigned group work at the initial phase because her previous experience showed that students show deeper engagement and persistence when they work collaboratively. Teachers must be aware of the performance of each student in group activities. Some passive students may remain silent while more demonstrative students lead the group discussion and play the role of coach.

In the collaborative learning process, students often inspire each other. For instance, in Group A, Mary reminded group members that they could refer to some useful online information. John had fluent writing skills, and he enjoyed the role of editor. Joan also had excellent writing skills, but she decided to be the anchor after negotiation with John. After they chose their different roles, everyone insisted they finish their own responsibilities, and they improved their performance by heeding peer comments.

Constructing Meaning

Value-related valences are associated with the construction of meaning. If students perceive the value of knowledge, their motivation to learn increases. Setting a meaningful goal for students is an important factor to promote motivation. Students should be given the opportunity to construct meaning in text as well as to build a rationale for the meaningfulness of literacy activities[3]

In the geography class, Group C spent five minutes introducing the natural resources of their country, leaving only five minutes to present the rest of the information. Ms. Betty suggested they reduce the amount of time spent on natural resources even though they liked this topic. She helped the students understand the importance of a balanced report. Ms. Betty knew that if she did not help students discover the value and importance of doing the assignment, they would doubt its usefulness, and their motivation would decrease.

Consequences

People enjoy having their work and learning achievement appreciated and recognized by others[4]. When students are provided channels to display their work, motivation increases. There are various strategies for displaying students' work, such as hanging their posters on the wall, presenting their work at a science fair, publishing their work on web sites, and providing links to other students. There is no "correct" way to complete a project, and students can compare their creativity, integrating articles and presentation ability with other teams. This strategy creates a positive feeling about effort, ownership, achievement, and responsibility[3]

To implement this strategy, Ms. Betty borrowed a camera from the media center. She taught students how to film and asked each group to film their television news release. When each group finished filming, Ms. Betty displayed

Conclusion

The Six C's of Motivation strategies have the potential to enhance students' motivation when applied to open-ended tasks[3]. There is no single correct answer in the open-ended tasks, allowing students to make their own choices and goals. In the open-ended task context, teachers should guide students in selecting the most appropriate choices, setting up short- and long-term goals, planning and evaluating their projects, working collaboratively, constructing personal meaning through the task, and displaying their final projects.

When integrating the six C's of Motivation into curriculum design, it is important to be aware of the progress of each group and provide feedback based on that progress. When students engage in meaningful open-ended tasks, their motivation increases and the effect of learning is more powerful.

Editor's questions:
Q1 Are these strategies to motivate students to learn also appropriate to encourage them to use their creativity?
Q2 What other strategies do teachers use to motivate students to use their creativity? and how are these strategies presumed to work?

Please share your thoughts through Creative Academic Magazine (CAM7) and posts to #creativeHE
https://plus.google.com/communities/110898703741307769041

Article source

Wang, S. & Han, S. (2001). Six C's of Motivation. In M. Orey (Ed.), Emerging perspectives on learning, teaching, and technology. Retrieved from http://epltt.coe.uga.edu/index.php?title=Six_C%27s_of_motivation

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Citation

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SHARED RESOURCES

One of the goals of our Creative Pedagogies for Creative Learning Ecologies project is to encourage participants to share their resources. We are very grateful to everyone who shares their resources with our community.

The Reflective Practice Learning Circle at Macquarie University Australia

Marina Harvey

Dr Marina Harvey, SFHEA
OLT National Teaching Fellow
Visiting Fellow, Queensland University of Technology
Honorary Fellow, Macquarie University

At Macquarie University our academic work with reflective practice is underpinned by (i) creative efforts to curate, and design, innovative approaches to reflection, and (ii) reflective exploration of our own practice, as teachers and learners through a Reflective Practice Learning Circle. Our circle has multi-disciplinary members drawn from three of the university's faculties who came together because of a shared commitment to reflective practice for learning. Our Reflective Practice Learning Circle has played a played a pivotal role in our contributions to the evolution of reflective practice at the University. It has oversighted reflective practice in the university's PACE (Professional and Community Engagement or WIL) programme, seeking and receiving internal grants to (i) evaluate the practice of reflection in these professional and community engagement units, and (ii) develop resources and training for staff in these and other units. The learning circle is an example of a Community of Practice (CoP) (Wenger 1998).

The Learning Circle has paid particular attention to fostering diversity in reflective practice. A disrupting the text' project (deFreitas, 2007) that scaffolded use of art practices in PACE and other units, encouraging shifts in the processes and products of reflection beyond traditional texts (e.g. reflective journals) is an example. The Learning Circle meets on a monthly basis in order to explore creative and innovative ways of practising reflection for learning. At the beginning of each meeting, the group participates in a different reflective activity. This is followed by a group discussion around the effectiveness of the activity, and how to implement and/or adapt the activity in a variety of contexts. These are examples of reflective practice experiments that pivot around a 'felt' appreciation of practice (Walkerden, 2009) and of a cycle of Participatory Action Research. Any person can lead a reflective experiment, an example of distributed leadership. The experiments are then piloted and adapted by Learning Circle participants in their own teaching, and from there developed as Practice Notes that have been shared in training workshops, and online, with colleagues across Macquarie. These monthly gatherings provide scaffolded support for developing reflective capacity at both the individual and the group level, which is crucial to embedding reflective practice into the wider university community.

Members of the Learning Circle include:
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Reflection for Learning Circle Publications

Harvey, M., Baker, M., Fredericks, V., Lloyd, K., McLachlan, K., Semple, A. & Walkerden, G. (2017). Reflection for learning: a holistic approach to disrupting the text. In J. Sachs and L. Clarke (Eds). *Learning through community engagement - Vision and practice in higher education, 171-184.* Singapore: Springer.

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Acknowledgement

Links to some of the resources we have created are shared below:

Title	URL
Reflection for Learning – Debriefing	http://youtu.be/dKuoCmvSHZw
Reflection for Learning - How do you assess reflection?	http://youtu.be/q5xaJMMZRkY
Reflection for Learning - Methods of reflecting	http://youtu.be/H691EPbH3r4
Reflection for Learning - Planning for reflection in learning and teaching	http://youtu.be/izJK3a7lD8c
Reflection for Learning - What does reflection mean to you?	http://youtu.be/MfL5zavoT8A
Reflection for Learning - Why do you use/teach reflection?	http://youtu.be/ZLs7mZmCCLo
Macquarie University Reflection for Learning - The student perspective: What is reflection?	http://youtu.be/BzFckjPepr0
Reflection for Learning - The student perspective: What are the benefits?	http://youtu.be/6iMWjjCKQG4
Reflection for Learning - The student perspective: How do you reflect?	http://youtu.be/RHwcFV0Z7Ko
Reflection for Learning - The student perspective: Challenges of reflective practice	http://youtu.be/IXGdeBz3H1I
Reflection for Learning: Discipline Case Study – Science (Dr K-Lynn Smith)	http://youtu.be/Anuo87syy4Q
Reflection for Learning: Discipline case study - Museum studies (Dr Theresa Winchester-Seeto)	http://youtu.be/9rYhnbPZipU
Reflection for Learning: Discipline case study – Marketing (Dr Chris Baumann)	http://youtu.be/oiBggENPr_g
Reflection for Learning: Discipline case study - Adaptive management (Dr Greg Walkerden)	http://youtu.be/0U6CAWrlngc

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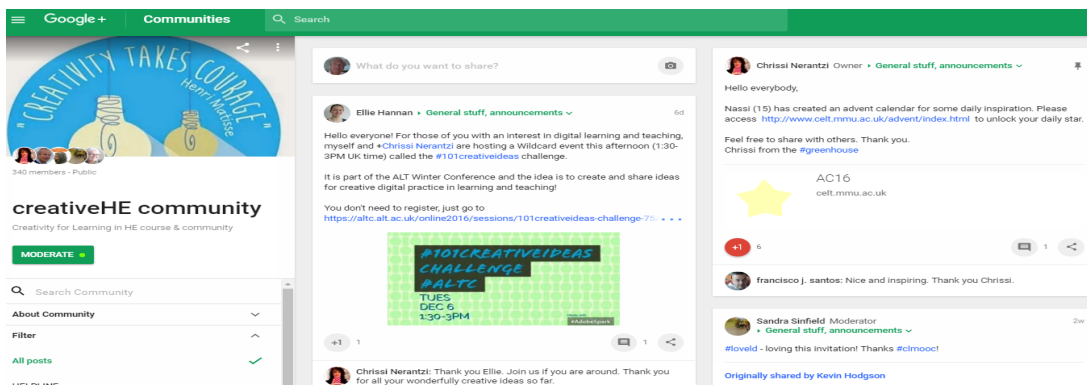HOME / RESOURCES / BLOG / MAGAZINE / CREATIVE PEDAGOGIES / MORE...

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Creative Academic champions creativity in all its manifestations in higher education in the UK and the wider world. Our goal is to support a global network of people interested in creativity in higher education and committed to enabling students' creative development. Our aim is to encourage educational professionals to share practices that facilitate students' creative development in all disciplines and pedagogic contexts, and to connect researchers and their research to practitioners and their practice. Our ambition is to become a global HUB for the

Google+ Discussion Forums

https://plus.google.com/communities/110898703741307769041

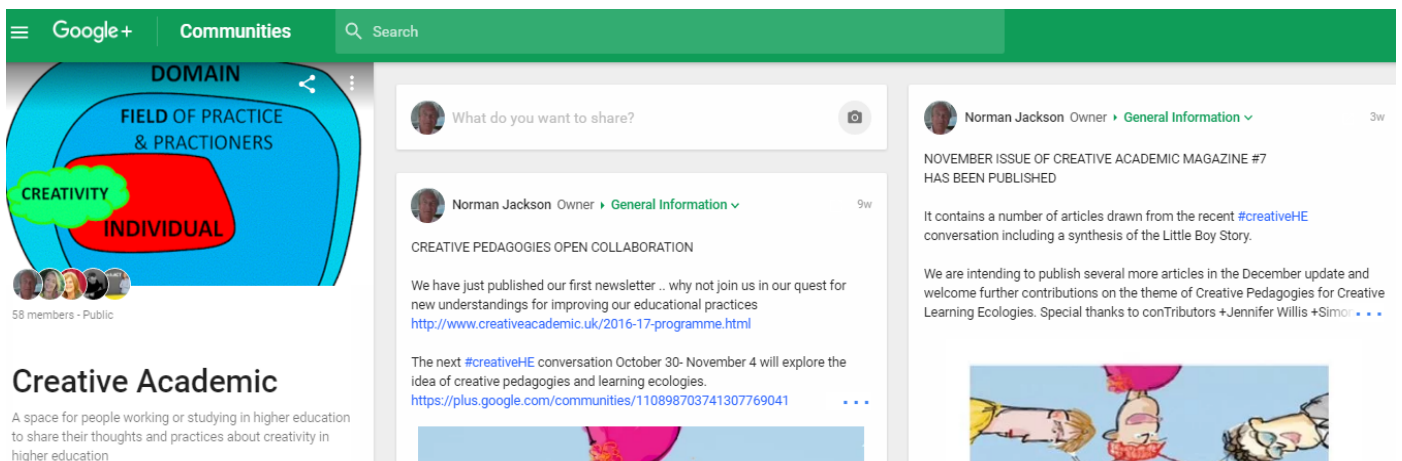# https://plus.google.com/communities/113507315355647483022

relevant to their own interests, motivation, and desire to produce something that is important to them!

But there is a third characteristic of playground pedagogy that should be infused into at least some of our formal learning   situations if we are to improve the efficiency of learning. This characteristic, pure and simple, is enjoy- ment! Whenever people ask me to define what I mean by enrichment or high end learning, I always answer with what

I call the three