# ECOLOGY OF CREATIVITY: A TALE OF EMERGENCE IN PRACTICE NORMAN JACKSON

SLIDES & NARRATIVE http://www.normanjackson.co.uk/luminate.html

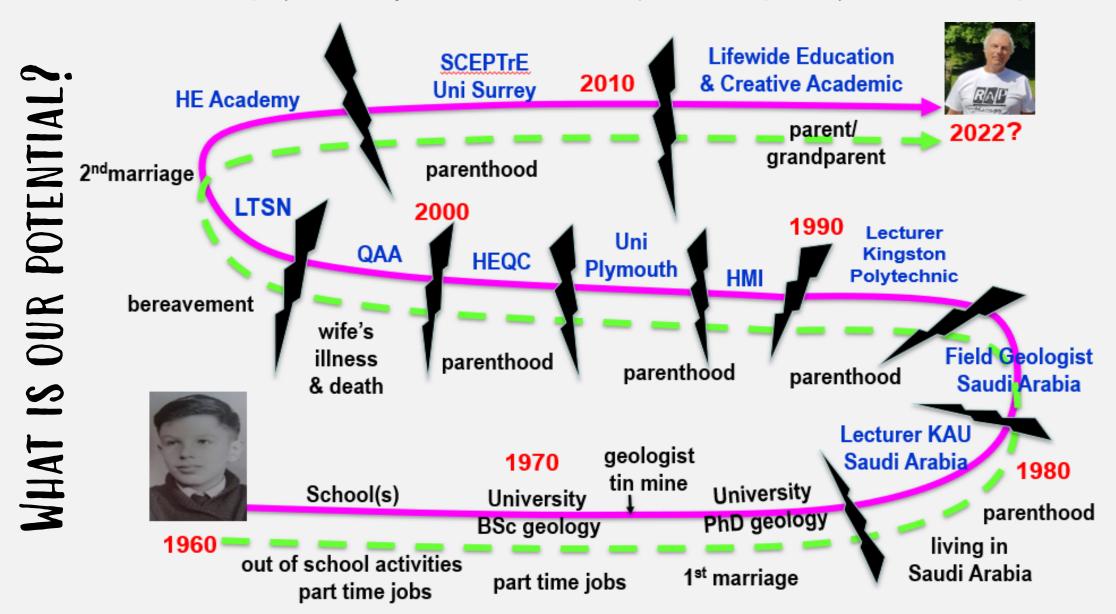








# LIFELONG DIMENSION OF PARTICIPATING & DEVELOPING



# LIFEWIDE DIMENSION OF PARTICIPATING & DEVELOPING



# IS OUR POTENTIAL? WHAT

# NEEDS THAT HAVE TO BE SATISFIED & MOTIVATIONAL FORCES THAT DRIVE LIFEWIDE PARTICIPATION

Self-actualisation	Growth
Self-esteem	Relatedness
Belongingness	
Safety	Existence
Physiological	

Abraham Maslow (1943) Clayton Alderfer (1969)

# LIFEWIDE SITES FOR DEVELOPING & REALISING POTENTIAL

VIRTUAL Our Ontological Journey INTERESTS **FAMILY** FRIENDS HOBBIES OTEC PER WORK HOME STUDY CPD **ENVIRONS** VIRTUAL





Formal / non-formal Individual Intended Task-focused

Need

LEARNING

LIFELONG

Directed

**Planned** 

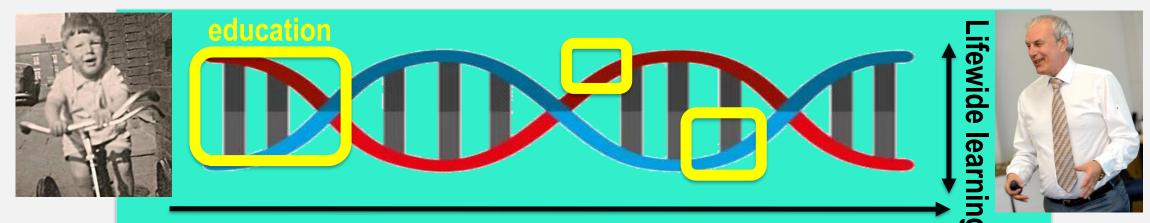
**Extrinsic motivation** 

Cognitive

**WE INTEGRATE** learning & development from every part of life & opportunities for creativity emerge

Informal Social **Unanticipated** Incidental Interest **Self-directed Emergent Intrinsic motivation Emotional** 

# DEVELOPING & REALISING OUR POTENTIAL IS A LIFELONG-LIFEWIDE PRACTICE



Lifelong learning - education, work & other aspects of life are woven together by individuals in ways that have meaning to them

"The whole of life is learning therefore education can have no ending" Eduard Lindeman (1926)

but we need to make the lifewide dimension of lifelong learning explicit in order to see and appreciate this.



Intelligent Machine Age

LESS WORK

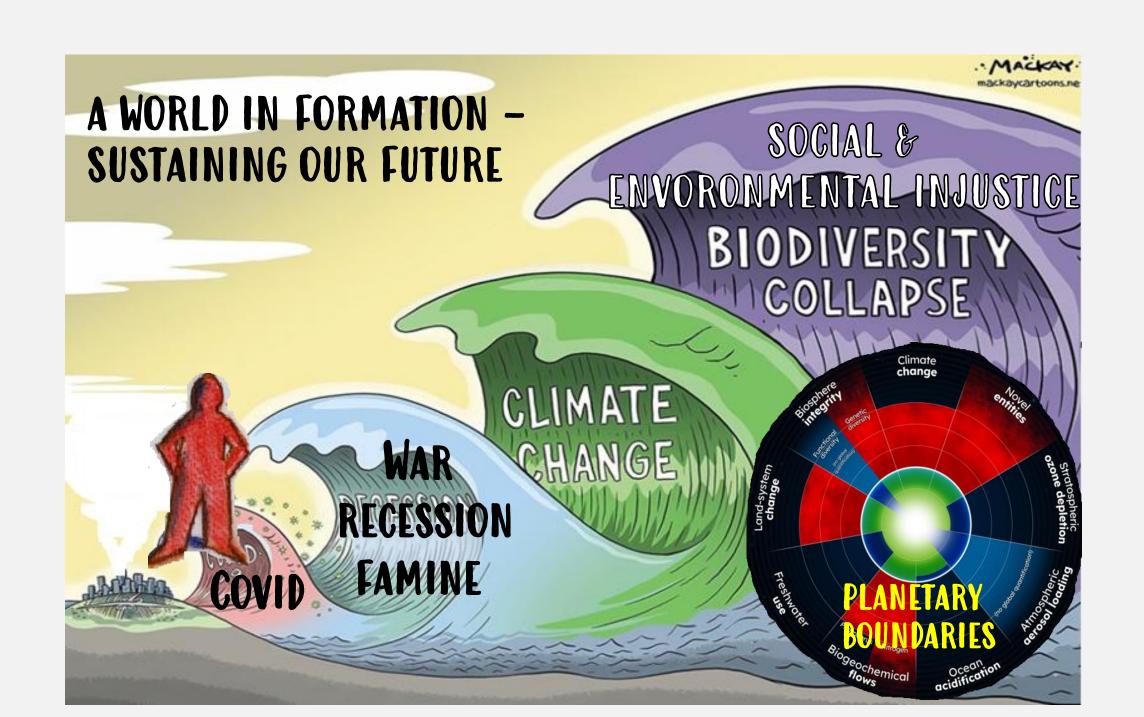


100 year learning lives

1920

2020

2120



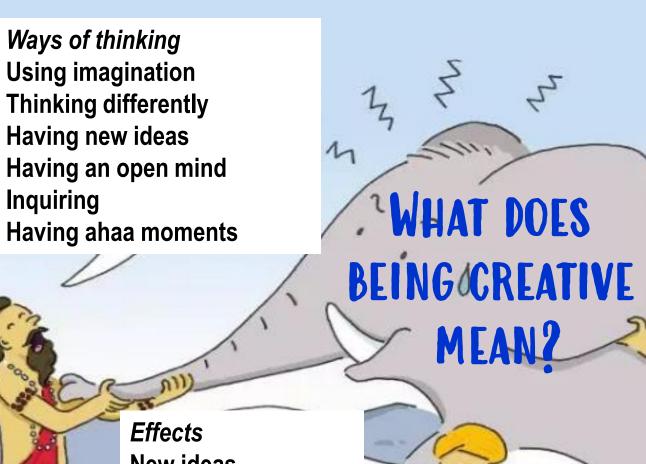
# GLOBAL GOALS & EDUCATION TO SUSTAIN A FRAGILE WORLD



Creativity is at the heart of sustainability. Creativity is rooted in sustainable social, economic, environmental and cultural practices. It can mean anything from humanity's ability to transform itself to tackling specific problems.

Hans d'Orville (2019) Special Advisor to Director-General of UNESCO





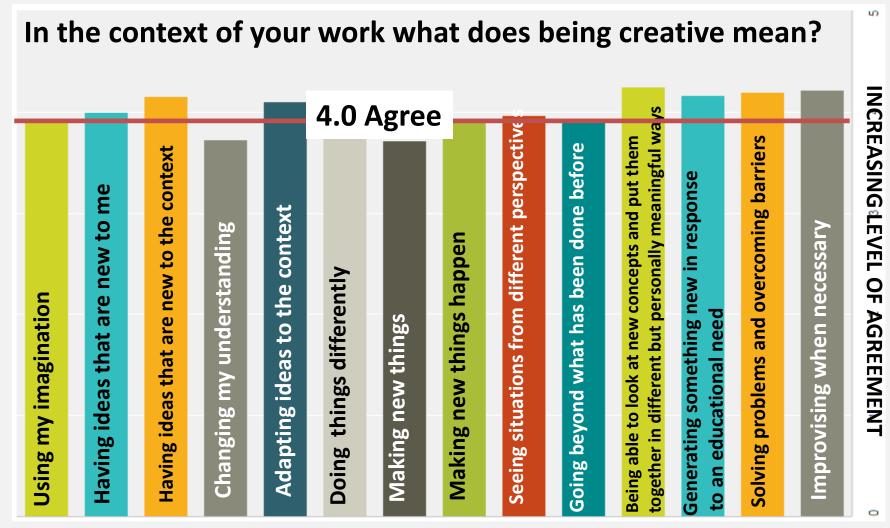
Doing
New things
Solving problems
Connecting
Combining
Inventing
Making
Performing
Communicating

Attitudes
Motivated
Enthusiastic
Curious/inquisitive
Willing to try
Willing to take risks
Determined
Obsessive

Effects
New ideas
New things
Changes what exists
Changes you
Innovation
Transforming



# HE TEACHER BELIEFS ABOUT CREATIVITY #Ithechat n=40



These ways of thinking & acting begin to reveal how creativity is experienced in higher education teaching practices

## HE TEACHER BELIEFS ABOUT CREATIVITY

#Ithechat n=40

Creativity is a rare gift that only a few people have

Some people are naturally more creative than others

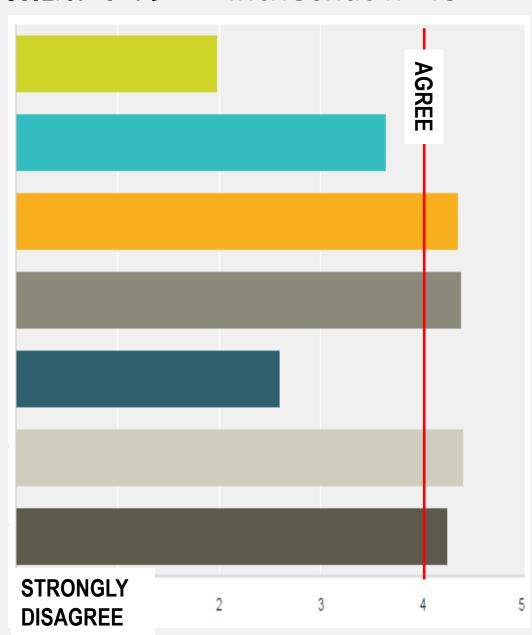
Most people can develop their creativity if given the opportunity to do so

Developing students' creativity should be integral to their development at university

University programmes are designed to encourage students' to use and develop their creativity

HE *could* do more to encourage & support students' creative development

HE *should* do more to encourage & support students' creative development



# WHAT DOES CREATIVITY MEAN IN THE ACADEMIC DISCIPLINES?

### Finding and solving complex problems

Being imaginative and original – able to think generatively & associatively having new ideas and being able to adapt existing ideas.

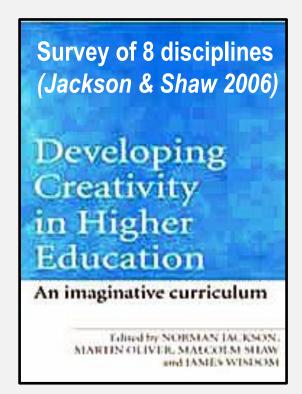
Being curious having an enquiring disposition – being able to 'see'

Being resourceful – finding and making use of what is available

Being able to think synthetically and relationally – to connect things in novel ways and recognise patterns

Being able to think critically and analytically to evaluate ideas

Being able to communicate ideas to enable people to understand and see things differently



# CREATIVITY AS ORIGINALITY

In psychology the "standard *consensual* definition" of creativity consists of "effectiveness and originality." (Runco and Jaeger 2012).

[But there are] two ambiguities. Firstly, the definition leaves open the choice of the **context** and **norms** against which to measure originality and effectiveness. Secondly, it does not discuss the possible role of a subjective judge (Colin 2019).

Creativity is a phenomenon whereby something new and valuable is formed (*Latin creō "to create, make"*).(Wikipedia).

The [something new] may be intangible (such as an idea, scientific theory, musical composition or joke) or a physical object (such as an invention, literary work or painting).

# CREATIVITY AS TRANSFORMATION OF WHAT ALREADY EXISTS



'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 [their] life' *Carl Rogers* (1960)

product = ideas, material or virtual objects, practices, performances, relationships, processes, learning and more.....



MEANINGS OF CREATIVITY ARE GENERATED IN SITU situations provide contexts, cultural norms and subjective users & judges

# CREATIVITY AS A PROCESS OF TRANSFORMATION & REGENERATION



"Creativity is the process through which we take elements of ourselves and the world around us and transform them into something new....In the process we transform the world and ourselves"

(Adapted from Bennick, 2009, TEDx Puget Sound).

# SIGNIFICANCE & SCALE OF CREATIVITY





4C Model of creativity

James Kaufman and Ron Beghetto

**Big-c** eminent creativity which is reserved for the great. **mini-c** creativity inherent in the learning process **Pro-c** expertise in any domain

Kaufman, J.C. and Beghetto, R.A. (2009) Beyond Big and Little: The Four C Model of Creativity. Review of General Psychology 13, 1, 1-12.

# CREATIVITY CONTEXTS & NORMS

CONTEXTS FOR CREATING
Situations within which creativity emerges

world

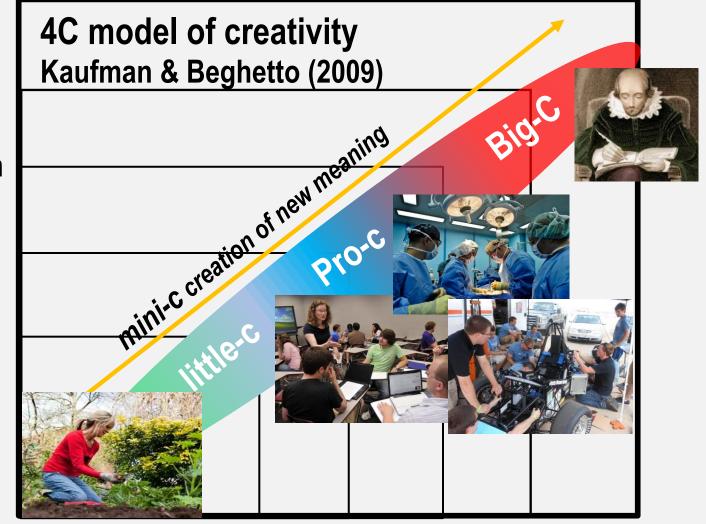
society

field/domain

organisation/ community

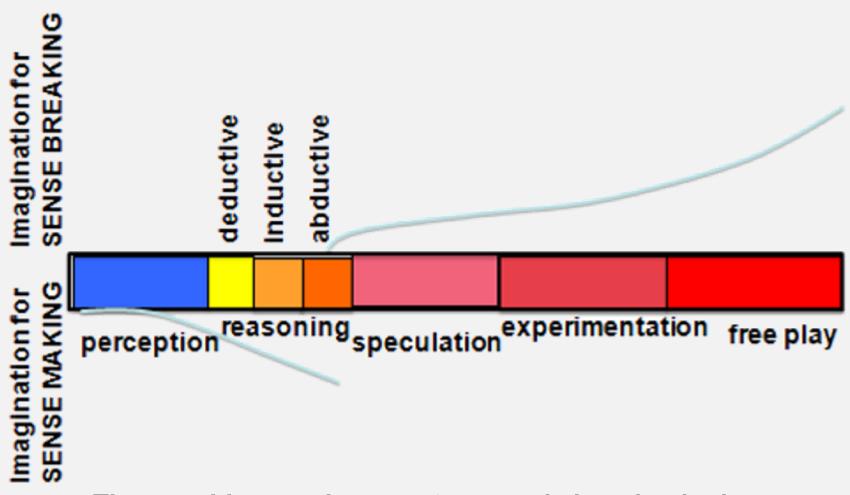
family/ group/team

individual



Where the results of creativity are recognised, judged & valued NORMS FOR JUDGING & VALUING CREATIVITY

# THINKING CREATIVELY



The cognitive continuum – 'pragmatic imagination' Pendleton-Julian and Brown (2016)

# THINKING CREATIVELY







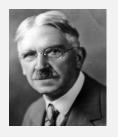
perception

reasoning

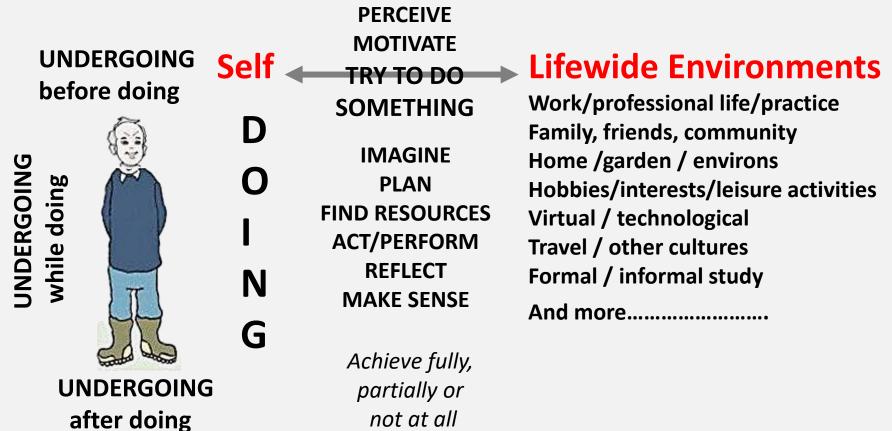
imaginative insight

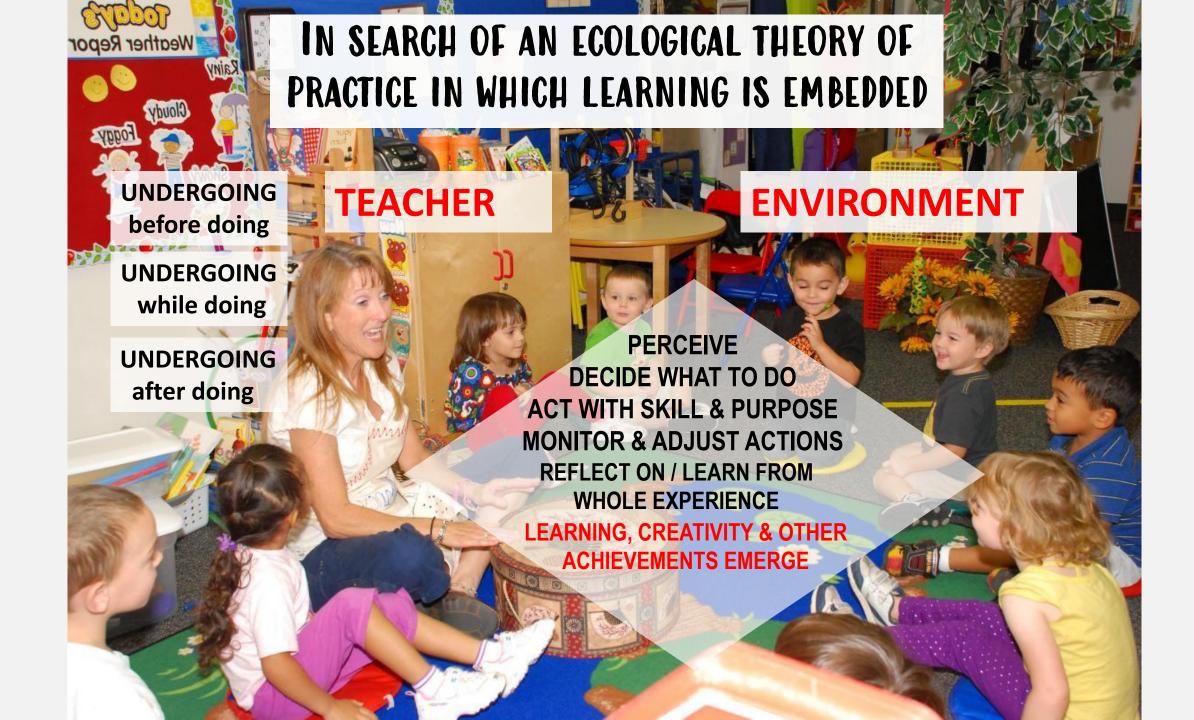
We interact with our environment, perceive and try to make sense of information flows, create meaning and act upon these meanings. In this way we change our understanding 'mini-c'.

# IN SEARCH OF AN ECOLOGICAL CONCEPT FOR PRACTICE, LEARNING & CREATIVITY



"When we experience something we act upon it, we do something; then we suffer or undergo the consequences. We do something to the thing and then it does something to us in return" John Dewey





## ECOLOGY OF PRACTICE IN WHICH LEARNING & CREATIVITY ARE EMBEDDED

4 SPACES
Physical –
classroom
Social, Emotional
Intellectual, Liminal,
Creative

3 RESOURCES (knowledge & information flows, tools, materials, technologies) teacher's pedagogical knowledge, her knowledge of each child, the children's own experiences, learning aids, posters/ pictures, musical instruments, writing materials, pupils' work, internet

#### **PAST**

#### **5 PLACES**

The classroom is the significant place for situational learning through the experience of doing

#### **6 RELATIONSHIPS**

Teacher – children,
Between children
Teacher – parents,
Parents- children
And relationships with
subject, environment,
materials, tools & activities



7 PROCESSES/ACTIVITIES/EXPERIENCES
Eg talking, discussing, listening, showing,
telling stories, singing, dancing, reading,
painting and more

2 AFFORDANCE FOR LEARNING In the teachers activities The classroom environment

The children's responses

#### FUTURE -

#### 1 CONTEXT(S)

Moral purpose of education
Early years school ethos & culture
State educational policies
The teacher's intentions

The teacher consciously and skilfully weaves together elements of herself and the world around her and transforms them into something new....In the process she transforms herself and learners' understanding.

# ECOLOGY OF PRACTICE HEURISTIC

#### **3 RESOURCES**

information, knowledge, people, tools, technologies & other artefacts (anything that can be used)

#### **4 SPACES**

physical, social, virtual, intellectual, psychological, liminal, ontological

#### **PAST**

#### **5 PLACES**

significance of place for situational learning through the experience of doing

#### **6 RELATIONSHIPS**

with people, communities, places, ideas, objects, work, hobbies, problems, natural world - anything!

#### **WHOLE PERSON**

with their mind and body, purposes motivations, knowledge and skills, seeking, sensing, perceiving, feeling, imagining, relating to and interacting with their environment, interpreting & making sense of their situations, weaving together the things that matter to accomplish their goals

#### **ENVIRONMENT**

#### 2 AFFORDANCES

possibilities for thinking and action that can be perceived or imagined

#### 1 CONTEXTS

situations, circumstances, culture, ourselves, problems/opportunities -

#### **FUTURE?**

LEARNING, CREATIVITY
& OTHER ACHIEVEMENTS
EMERGE

#### 7 PROCESSES/ACTIVITIES/EXPERIENCES

eg study, work, making, research, inquiry, problem solving and much more

# GEOLOGIST'S ECOLOGY OF PRACTICE: LEARNING & CREATIVITY EMERGE



# GEOLOGIST'S ECOLOGY OF PRACTICE: LEARNING & CREATIVITY EMERGE

#### PLACE & SPACES

He inhabits the only place where he can make this particular map. As he begins his project he enters a liminal space. His cognitive spaces are rich in curiosity, inquiry, analysis and imagination.

#### RELATIONSHIPS

His presence in the landscape enables him to form relationships with the materials, landforms and the problem he is solving. The tools he is using and the artefacts he is creating become part of him.

#### PAST

#### PROCESSES/ACTIVITIES

His interactions with his environment are not random. He creates a process for systematically and skillfully exploring, observing, recording and analyzing the geology in order to solve his puzzle and create a geological map.

He uses his mind and body to create and inhabit an ecology of practice in order to interact with his environment to make a geological map. The way he interacts (his performance) has been developed through past experiences and performances. What he thinks and does is influenced by his interactions and his emergent understandings and feelings as he walks and climbs, observes, records and thinks. His understandings are influenced by the information flows he accesses. His perception, reasoning, and imagination, his will, beliefs, values, emotions, creativity, confidence, self-belief, self-awareness and ability to regulate himself are all involved as he works to achieve his goals using the tools of his field craft.

PRESENT

#### RESOURCES

He draws on his own embodied knowledge and experiences and the codified knowledge of those who have mapped and studied his field area. Through his purposeful presence he accesses the information contained in the landscape and materials which flows into him through sight, touch and sound, to fuel his perceptions and engage his sense making. He wears clothes appropriate for the weather and terrain. He uses tools like a camera, hammer, hand lens, compass, map case, binoculars, notebook, base maps, aerial photos, rucksack and more. He uses off-road vehicles and equipment to camp and sustain himself.

#### AFFORDANCES

The possibilities for thinking & action are in the TASK to create a geological map, in the landscape - rocks and soils, in the tools and technologies he uses and in the artefacts he creates.

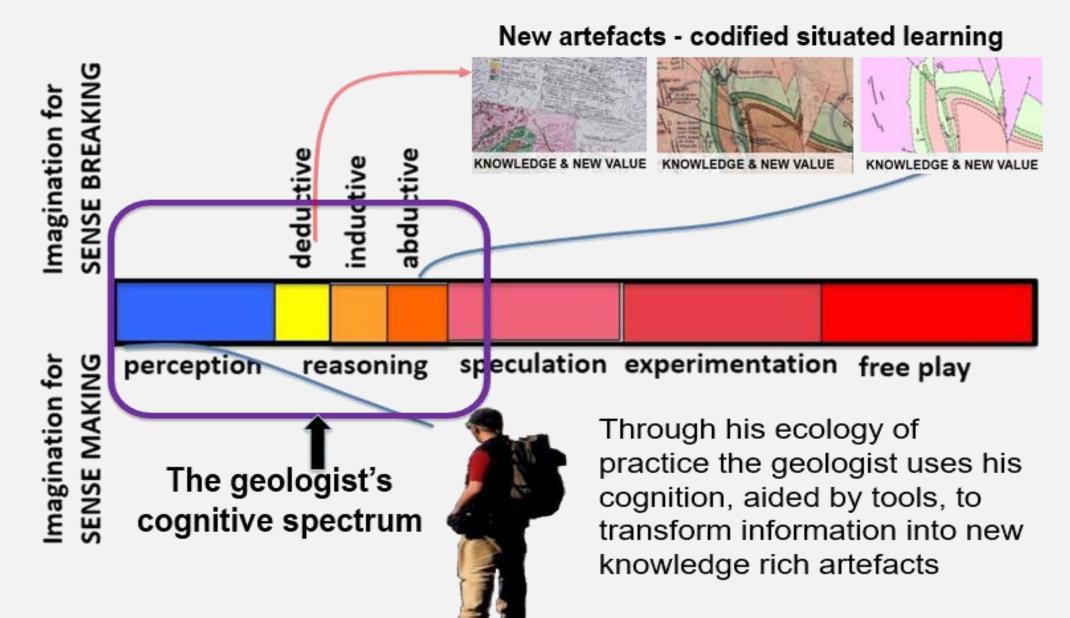


The geologist consciously and skilfully weaves together elements of himself and the world around him and transforms information into knowledge which is codified in a geological map. In the process he transforms himself and our understanding of the world.

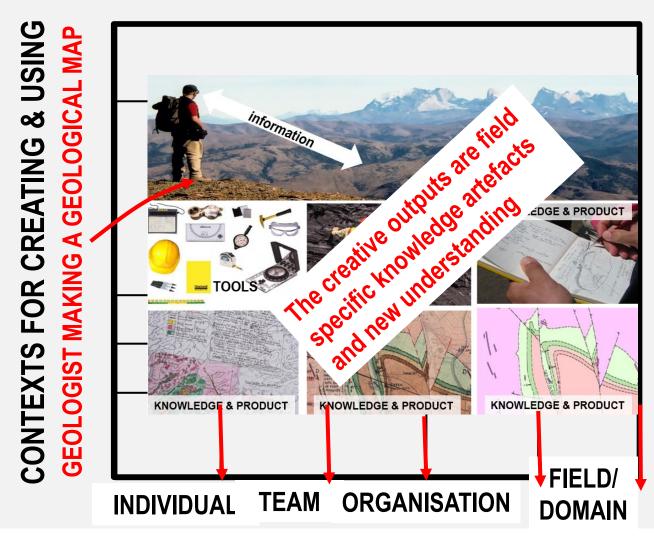
#### CONTEXTS

The challenge of making a geological map in an unexplored landscape. His organization's surveying / exploration project. His ambition to create a better version of himself.

# SITUATED COGNITION, LEARNING & CREATIVITY



# PRO-C - CREATIVITY INVOLVING EXPERTISE

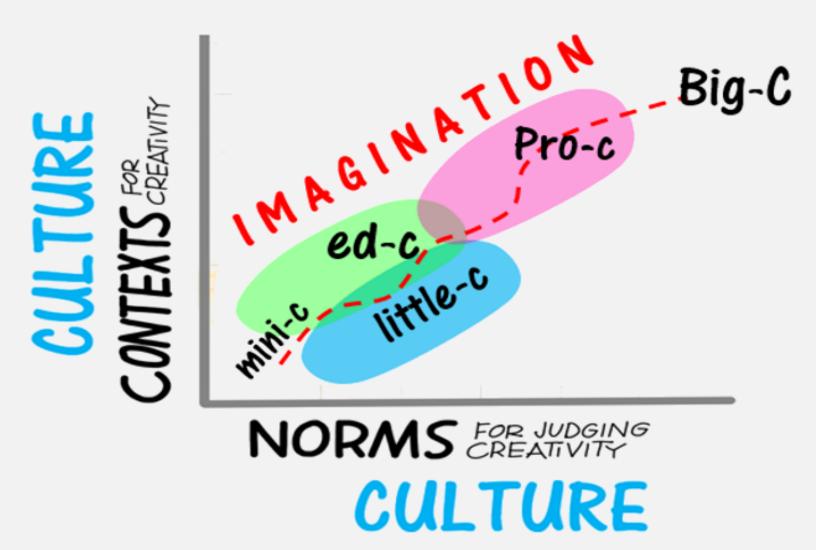


NORMS FOR JUDGING & VALUING CREATIVITY
AS THE PRODUCTS ARE USED

# HOW DO WE LEARN HOW TO CREATE AN ECOLOGY FOR PRACTICE WITHIN WHICH CREATIVITY IS EMBEDDED?



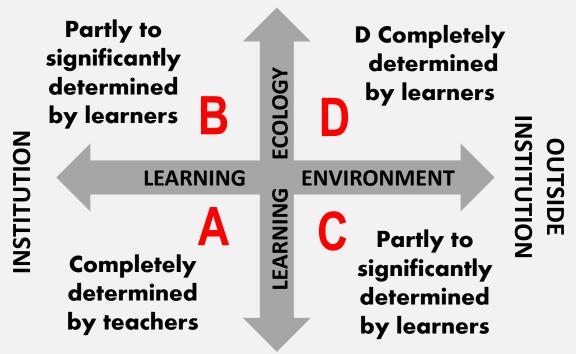
# THE ARGUMENT FOR AN EDUCATIONAL DOMAIN



5C Model of Creativity (Jackson & Lassig 2020) developed from the 4C model (Kaufman & Beghetto 2008)

# ENABLE LEARNERS TO CREATE OWN ECOLOGIES FOR PRACTICE IN WHICH CREATIVITY IS EMBEDDED

Determined by learner



Determined by institution or other body e.g. work placement or volunteering

Learning ecology includes contexts, goals/problems, affordances, processes, spaces, relationships, resources (knowledge, tools, technologies, artefacts)

## PEDAGOGICAL PRACTICES THAT ENCOURAGE STUDENTS' CREATIVITY

Many of these approaches can form the basis for an ecology for practice

INQUIRY- BASED PROBLEM-BASED LEARNING

PROJECT- BASED LEARNING

**FIELD STUDIES** 

DESIGN THINKING

VISUALISATION TECHNIQUES

IMPORTANT FEATURES OF CREATIVITY IN DISCIPLINES

- Using imagination
- Being original new ideas / perspectives / things /solutions
- \* Being curious / inquiring / find solutions
- \* Being resourceful
- \* Being able to combine, connect, synthesise etc
- \* Being able to think critically, analyse, evaluate
- \* Being able to think reflectively / /empathically
- \*Being able to represent ideas and communicate meaning to others & form / tell stories

GAMES
SIMULATIONS
CASE STUDIES
ROLE PLAY

MAKING SOMETHING

MAKING SOMETHING HAPPEN 'ENTERPRISE'

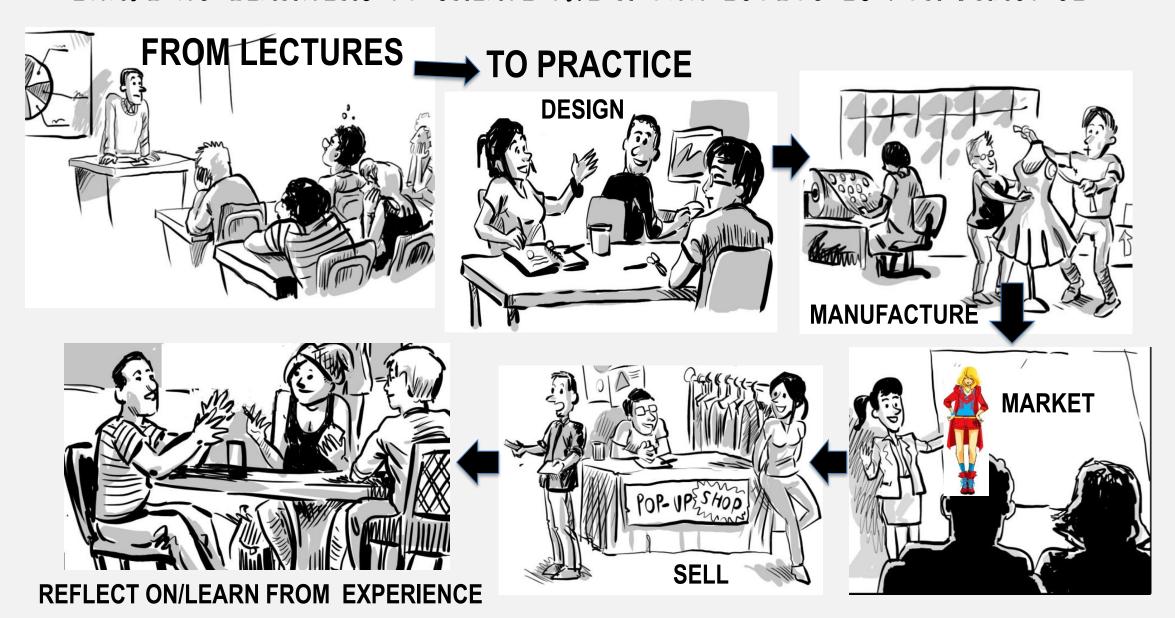
STORY & REFLECTIVE NARRATIVE

# SIGNATURE PEDAGOGIES & SIGNATURE LEARNING EXPERIENCES

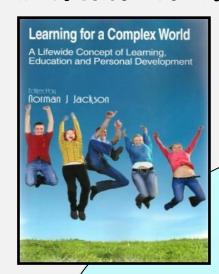


Learning to practice and be creative as an architect, engineer, surgeon, lawyer....

# ENABLING LEARNERS TO CREATE THEIR OWN ECOLOGIES FOR PRACTICE



# EMBRACING THE LIFEWIDE DIMENSION OF LEARNING IN HIGHER EDUCATION



The whole of life is learning therefore education can have no endings Eduard Lindeman

### LIFEWIDE CURRICULUM

Work-related
curriculum
Placement
Internship
Apprenticeship

**Academic** curriculum

Study programme /modules

May include fieldwork, projects in real world, study abroad, community projects UNIVERSITY ECOSYSTEM

Co-curriculum
Organised
learning
outside
formal
curriculum

#### **Extra-curriculum**

Part-time work and internships Running own

business

Volunteering & social enterprise

Mentoring

Student
Representation
& Societies

Managing own life

**Caring for others** 

Participating in Sport

**Travel** 

**Creative activity** 

Study abroad

**AN MORE!!!** 

World of infinite possibilities for learning

# LIFE AS CURRICULUM - THE NARRATIVE OF PERPETUAL BECOMING

# CATCHING STORIES

Shoe box
Blog
Scrapbook
E-portfolio
Video diary
Digital story
Movie
Slide show

## **ONTOLOGICAL JOURNEYS**

Narratives of becoming within which ecologies for practice, learning and creativity reside









Using life as curriculum enables students to reflect on their own ontological journey to reach self-awareness – the sense of authoring their life and how they construct themselves. *Pharr Sharrah* 



# A THOUSAND TINY UNIVERSITIES -BARBARA GRANT

"How can we [be] alert to the daily possibilities for transformation towards our imagined future university. I propose the idea of a thousand tiny universities as one that offers a ..basis for continually proposing and enacting in the present the kind of university we cherish."

A good place to start is to create and embody your personal manifesto 'the whole of life is learning and education can have no endings' Eduard Lindeman

# THANK YOU

## SLIDES & NARRATIVE

http://www.normanjackson.co.uk/luminate.html

# FREE RESOURCES AVAILABLE

https://www.lifewideeducation.uk/

https://www.creativeacademic.uk/

# VIBRANT COMMUNITIES

https://www.linkedin.com/groups/4667550/

https://www.facebook.com/groups/creativeHE

