

Gaining a Footing in the Landscape of Learning Ecologies

ECOLOGIES OF PRACTICE FOR LEARNING, PERFORMANCE & CREATION OF NEW VALUE

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SLIDES

<https://learningecologies.weebly.com/>

USING ECOLOGY TO FRAME OUR THINKING

Meaning – based on biological understandings of how organisms live and behave in the natural world e.g. ecosystem, ecotone

Model – relates abstract understandings to human situations. Tools to enable parts, interactions, activities and scope of a system of interest to be specified and understood in a particular domain.

Metaphor – for a type of structure or behaviour – sustainable, resilient, fragile

Mars et al – map similarities & differences between natural and organisational ecosystems

Pickett, S. T. A. and Cadenasso, M. L. (2002). The Ecosystem as a Multidimensional Concept: Meaning, Model, and Metaphor

Mars, M.M. et al (2012) The value of a metaphor: Organizations and ecosystems

LEARNING FOR A COMPLEX WORLD



A WORLD IN FORMATION



LIFELONG LEARNING FOR A WORLD IN FORMATION

LLL is about acquiring skills that enable us to survive (Lewis-Fitzgerald 2005).

The process of gaining knowledge and skills throughout life, often to help you do your job properly (Cambridge Dictionary)

Ability to continuously develop over life span OECD (2012)

LLL is a [lifelong] process in which people obtain meaning from interacting with their environment. (Wikipedia)

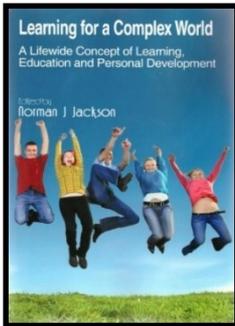


LIFEWIDE LEARNING - PARTICIPATING IN A WORLD IN FORMATION

CREATING MEANING EVERY DAY ACROSS THE WHOLE OF OUR LIVES

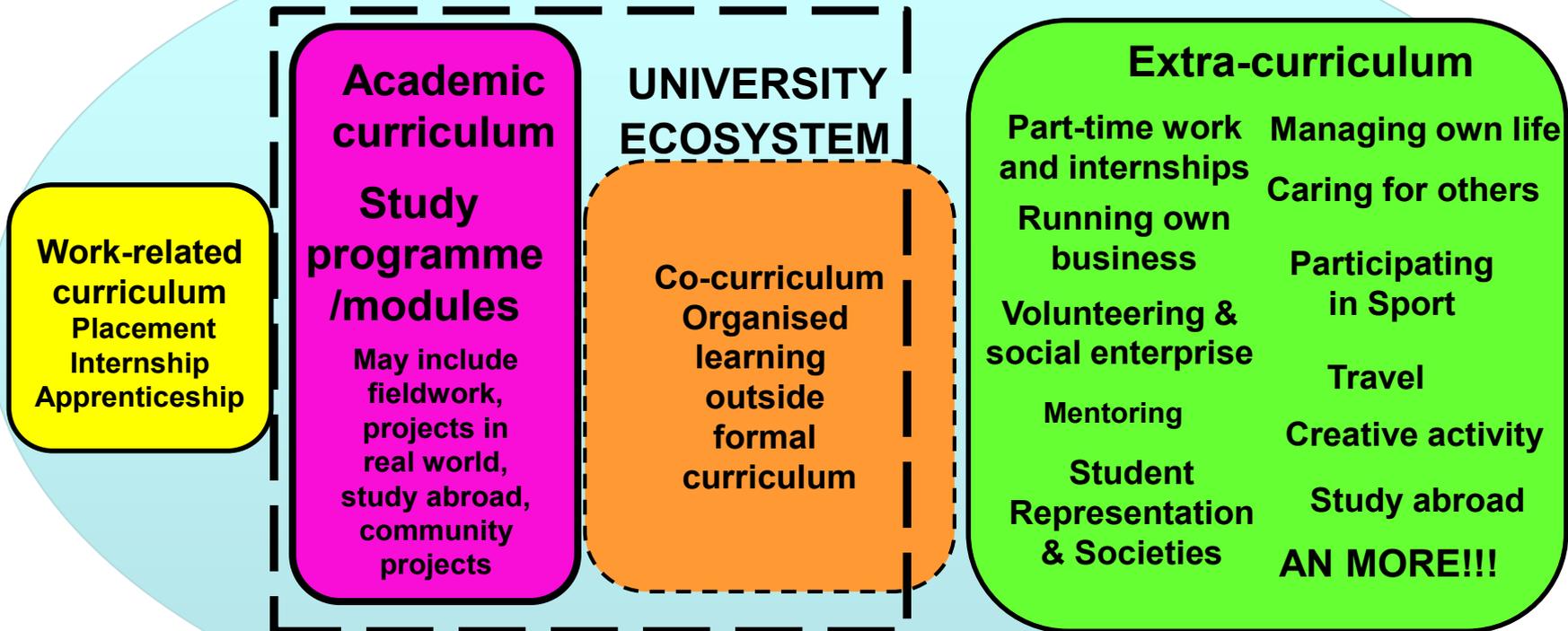


EMBRACING THE LIFEWIDE DIMENSION OF LEARNING



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

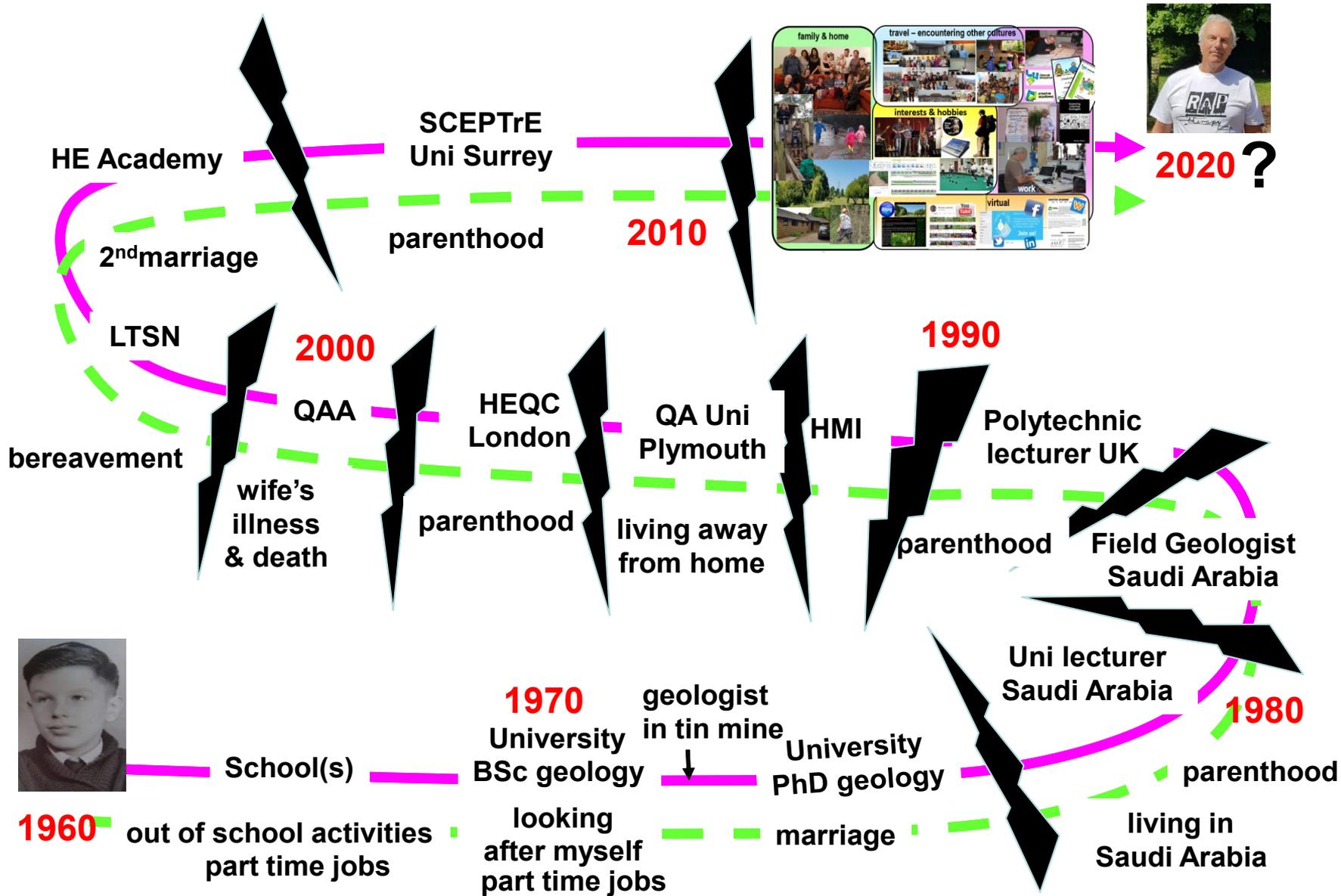
LIFEWIDE CURRICULUM



World of infinite possibilities for learning

WHAT DOES IT MEAN TO PARTICIPATE IN A WORLD IN FORMATION?

MY LIFELONG-LIFEWIDE LEARNING JOURNEY



HOW DO I PARTICIPATE IN A WORLD IN FORMATION?

family & home



travel – encountering other cultures



interests & hobbies



virtual



LIFEWIDE

HUMAN ECOSYSTEMS - ECOSOCIAL SYSTEMS

A natural **ecosystem** comprises the complex set of relationships and interactions among the resources, habitats, and residents of an area for the purpose of living.



A human **ecosocial system** comprises the complex set of relationships and interactions among the human inhabitants, resources and habitats of an environment for the purpose of > performing, producing, making, creating, learning, developing and achieving



Ecosocial systems for the making and remaking of meaning

Lemke, J. L. (1997). Cognition, context, and learning: A social semiotic perspective

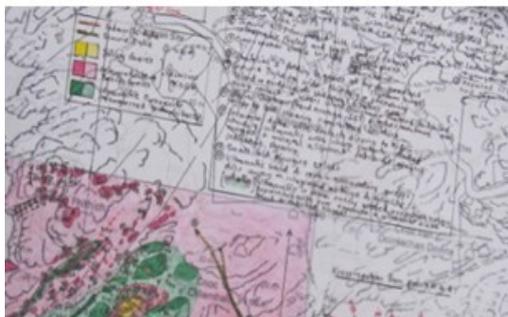
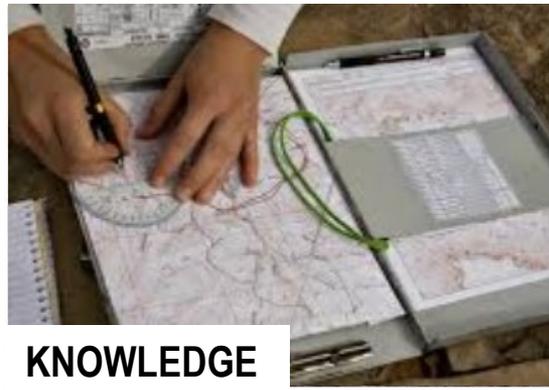


ECOLOGIES OF PRACTICE FOR WORLDS IN FORMATION



TOWARDS AN ECOLOGY OF PRACTICE

HOW DOES A GEOLOGIST MAKE A GEOLOGICAL MAP?



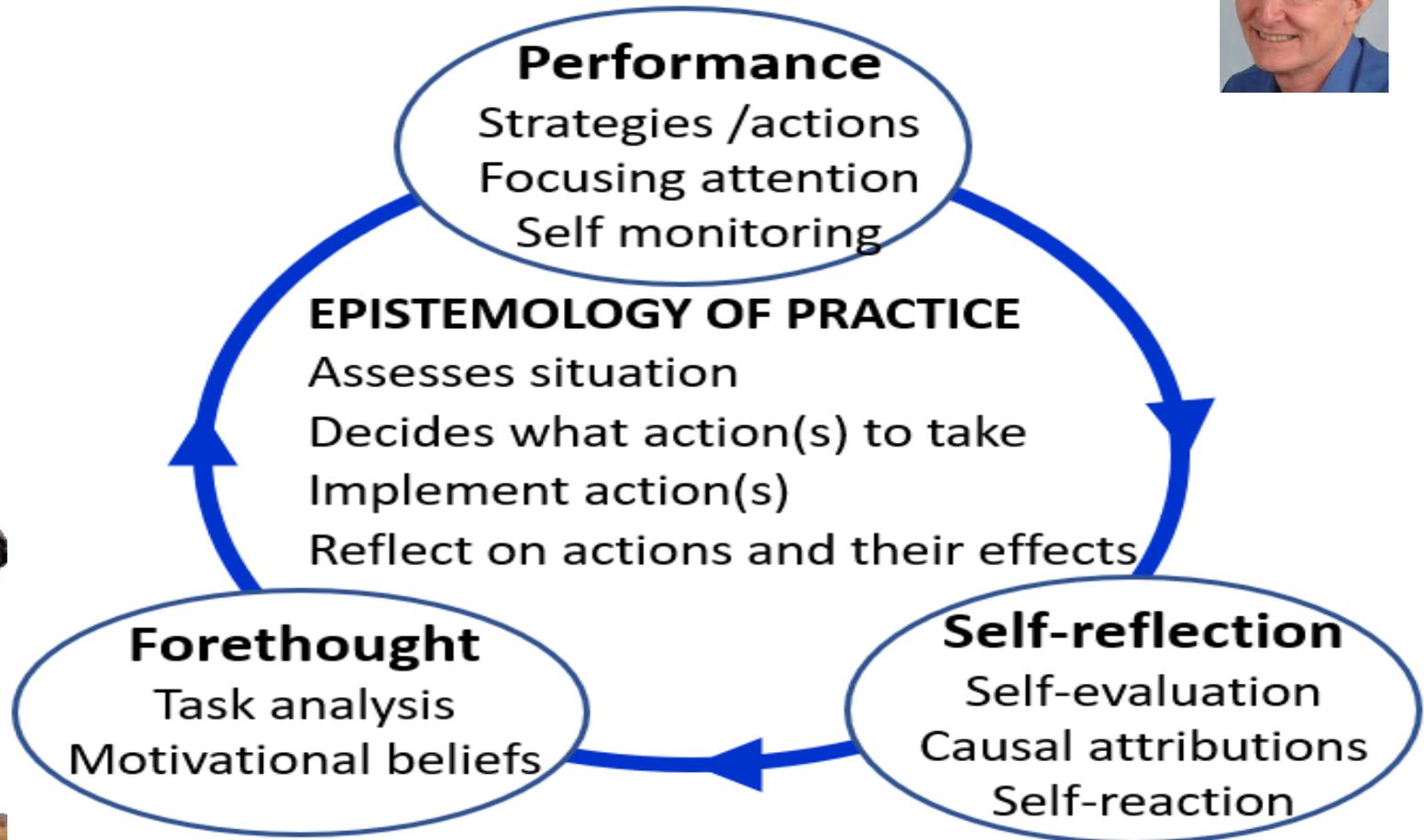
EPISTEMOLOGY OF PRACTICE



Michael Eraut

SELF-REGULATION

Barry Zimmerman

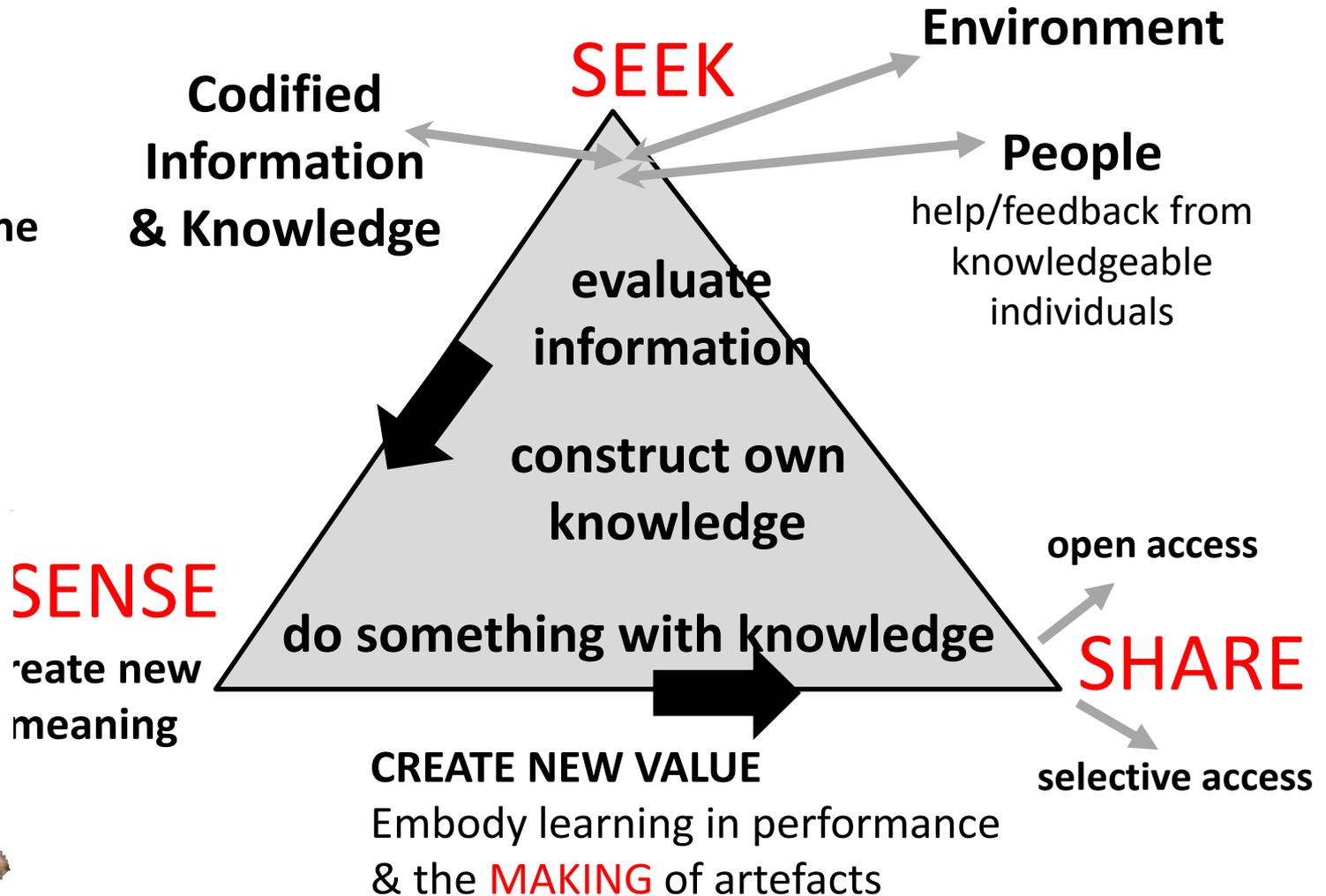


Eraut, M. & Hirsh, W.(2008) *Significance of Workplace Learning for Individuals, Groups & Organisations*
Zimmerman, B. J. (2000) *Self-regulatory cycles of learning.*

SEEK-SENSE-SHARE MODEL OF PERSONAL KNOWLEDGE MANAGEMENT



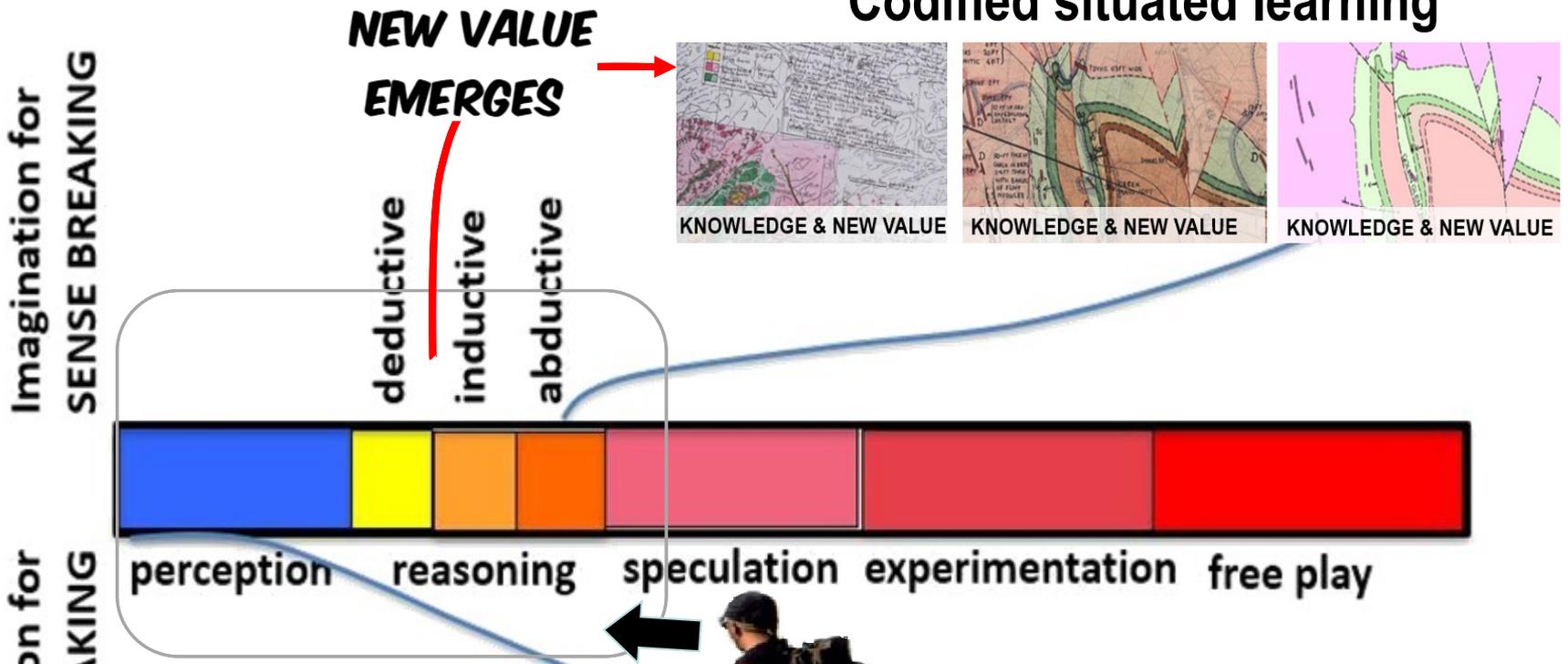
Harold Jarche



Jarche, H. (2014) The Seek > Sense > Share Framework

SITUATED COGNITION- SITUATED LEARNING AND SITUATED CREATIVITY

Codified situated learning



The geologist's cognitive spectrum as he implements his ecology of practice



Diagram adapted from Pendleton-Jullian & Brown (2016) 'Pragmatic Imagination' p68-9

SITUATED CONCEPT OF CREATIVITY



'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)

Our expressive and pragmatic creative responses emerges from our uniqueness as individuals, relating to, caring for and thinking about the things that matter to us in particular contexts and situations.

Originality emerges from our ecology of practice that enables us to develop the situational understandings to act and thoughtfully and skilfully **WEAVE** together particular ideas/emotions/things/people and much more to create new meaning and value.

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 an environment to make a geological map developed through past experiences and by his interactions and his emergent observations, records and thoughts. His understandings. His perception, reasoning, analysis, creativity, confidence, self-belief, self-awareness as he works to achieve his goals using

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.

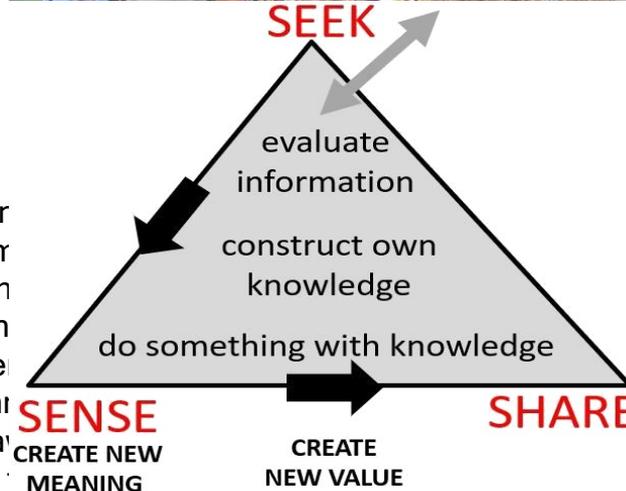
ECOLOGY OF PRACTICE



FUTURE

NEW VALUE & MEANING

Through skilful and thoughtful interactions with his environment he creates new meaning and value & becomes a better version of himself.



interact with
has been
influenced
limbs,
flows he
ions,
all involved

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.

ECOLOGY OF PRACTICE HEURISTIC

3 RESOURCES

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

2 AFFORDANCES

possibilities that can be perceived
or imagined for thinking and action

4 SPACES

physical, social,
virtual, intellectual,
psychological, liminal

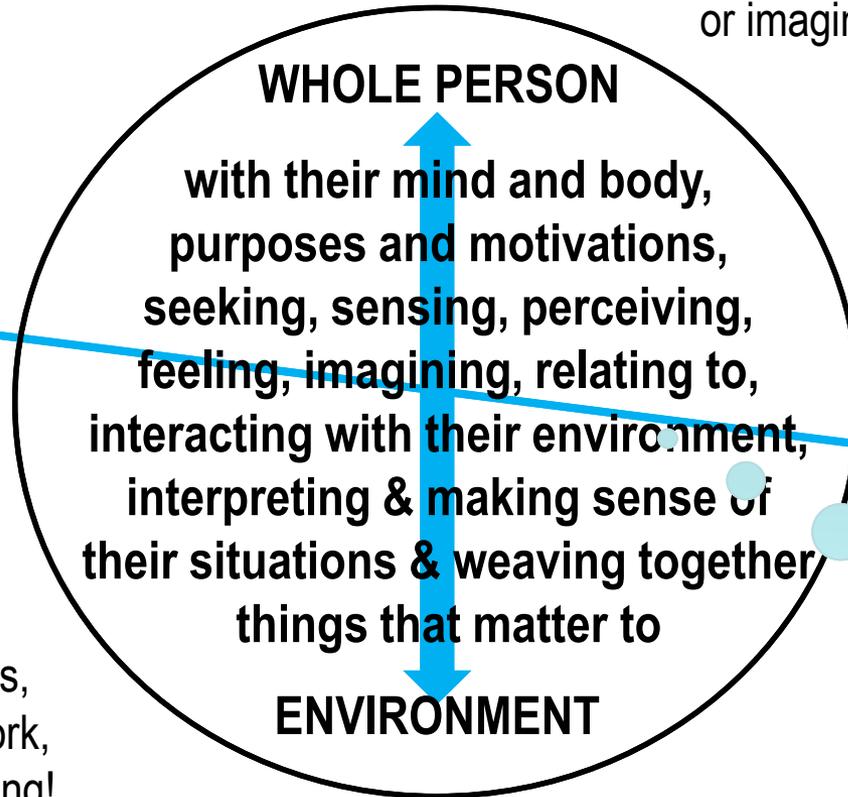
PAST

5 PLACES

significance of place
for situational learning

6 RELATIONSHIPS

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



1 CONTEXTS

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

FUTURE?

PERFORM
LEARN & CREATE
MEANING &
NEW VALUE

7 PROCESSES/ACTIVITIES/EXPERIENCES

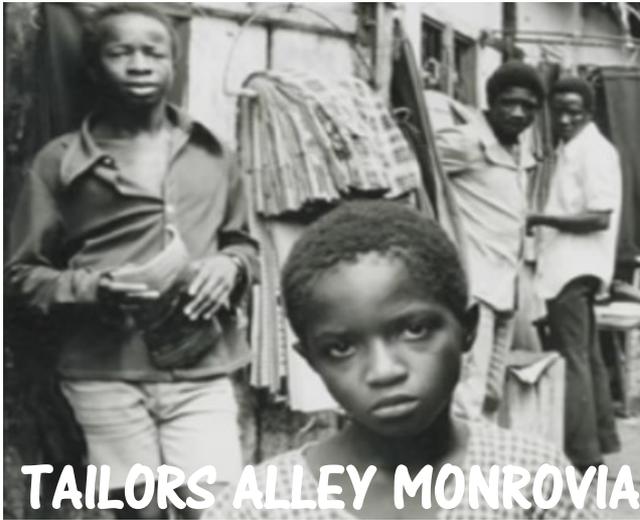
eg study, work, making, research, inquiry, problem
solving and much more, SEEK, SENSE, SHARE

DEVELOPING AN ECOLOGY OF PRACTICE

COMMUNITIES OF PRACTICE

- SITUATED LEARNING

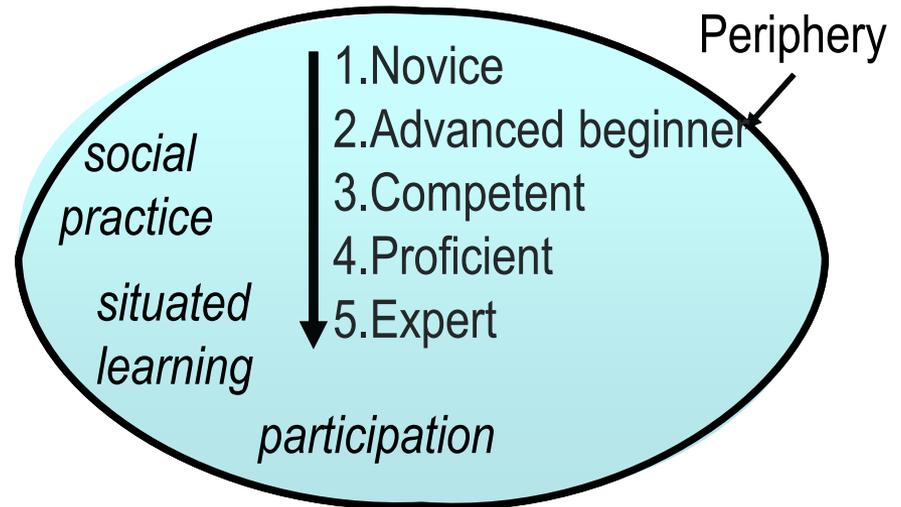
TAILORS ALLEY MONROVIA



TAILORS ALLEY MONROVIA



LEGITIMATE PERIPHERAL PARTICIPATION



Lave, J. & Wenger, E. (1991) *Situated Learning: Legitimate Peripheral Participation*.

NOVICE GEOLOGISTS LEARNING TO PARTICIPATE IN A COMMUNITY OF PRACTICE



THE ECOSOCIAL SYSTEM IN WHICH A GEOLOGIST WORKS

SOCIETY social / cultural / political / technological / economic influences

SYSTEM other companies & public organisations providing services
clients – e.g. Governments & Int Corporations, World Bank, Investors

FIELD – Professional Body, peer networks, wider community of practitioners
Codified knowledge of the discipline – maps and documents relevant to work

ORGANISATION – provides a commercial or public service context
provides a social, cultural, technological, economic environment

Field environment



Laboratory/Office



laboratories,
facilities,
resources,
managers,
geologists,
technical &
admin
support

A GEOLOGIST'S ECOLOGY OF PRACTICE



Learning how to create an ecology
of practice through a programme of
university education & training in a
Community of Practice

LEARNING ECOLOGIES IN EDUCATION

SPACES

Physical
Virtual
Intellectual
Creative

RESOURCES (knowledge, tools, artefacts, technologies) teachers' embodied knowledge, students own knowledge & experiences, explicit knowledge in books/articles, internet resources

RELATIONSHIPS

teacher -students
students & peers
students & others who support their learning



PROCESS

Forms of teaching – sage, guide, meddler
Nature of teaching activities & forms of learner engagement especially nature of independent work & peer collaboration

AFFORDANCES

In the courses/modules, activities teachers create,
In the resources inside/outside HEI
In peer groups.

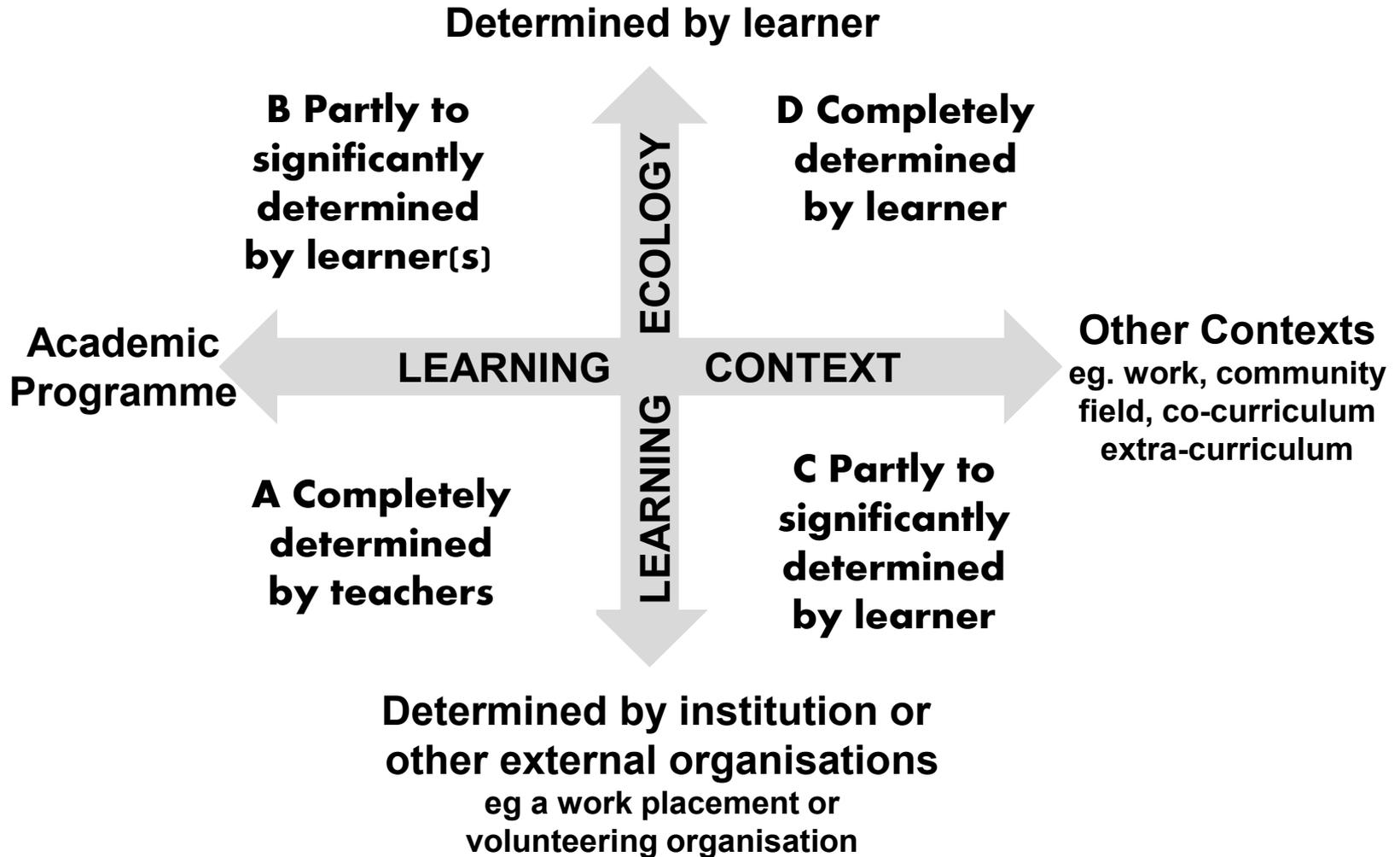
CONTEXTS

Institution
Subject/discipline
Course/programme
Teacher's own goals and aspirations

NEW VALUE

Students' learning and development

LEARNING ECOLOGIES IN HIGHER EDUCATION



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

LEARNING TO INNOVATE

1 Market Research
surveys & interviews



2 Discussions with
manager *strategy agreed*
funding bid successful



3 Seeking & finding experts with
knowledge of industry practice
Coaching & supporting them



4 Seeking &
finding help
with design of
on-line course.

CO-PARTICIPATION IN PROBLEM SOLVING & SITUATIONAL LEARNING

WELL THAT DIDN'T WORK SO LET'S TRY THIS
GREAT IDEA, BUT WHY DON'T WE DO THIS AS WELL?



COLLABORATION

Creating new value
WOW this is great!



6 Learning through the
experience of designing and
implementing the course –
how can we improve it?

EXPERIENCE



5 Battling institution
QA dept, Registry,
Finance... HELP!!!!



PLACE & SPACES

The university environment with its culture, structures and infrastructures provides the setting for the situated learning. As Linda begins her project she enters a liminal space. Her cognitive spaces are rich in inquiry, research, help seeking, conversation and negotiation.

RELATIONSHIPS

Mike and other EDC staff were key to success. They provided Linda with the expertise she needed to solve her problem of developing the on-line course and also supported her emotionally. People in Linda's professional network and her Head of School were also very important.

PAST

PROCESSES/ACTIVITIES

Linda had a vision of what she and her department wanted to achieve but she lacked essential knowledge and skill so she sought help from a knowledgeable practitioner in another department. Together they combined their knowledge and expertise to create a collaborative ecology of practice to achieve their goal. Linda scanned her environment for information that would be useful. She undertook market research to find out whether such a course would be viable. She sought and secured the help of expert practitioners in the fashion industry who were in her personal network of contacts. After finding contributors she designed a framework for the content and coached and supported them, providing feedback on their contributions. With Mike's help she became a skilled content editor and producer and learnt how to upload her courses to the portal. She had to engage and persuade the managers of some of the university's systems that could not accommodate her innovation to adapt/develop their systems. She had to ensure that the designs met the university's standards criteria for professional courses and ensure the course was validated through peer review.

RESOURCES

The university provided Linda with some (but not all) of the time for her project she subsidized the project with her own time. Linda and Mike draw on their own embodied knowledge and experiences of teaching and e-learning. Through her external contacts Linda finds knowledgeable practitioners who are willing to share their knowledge to produce the content for the course. She developed tools and frameworks (mediating artefacts) to enable these practitioners to contribute. With the help of Mike (her most important resource) she develops a framework (design tool) to guide production of content. The tool is underpinned by the research Mike has previously undertaken. They use IT tools to create the content and use a range of communication tools to interact at a distance.

AFFORDANCES

The possibilities for thinking & action are in the vision for the project and its execution. They are in the expertise of Mike and his team. and in Linda's professor

LEARNING TO INNOVATE



FUTURE

Implementation of the on-line course

NEW VALUE & MEANING

Through their collaboration Linda & Mike created new value for the university in the form of a high-quality on-line course for people working in the fashion industry. Their innovation caused a number of changes in university systems. Linda developed significant new capabilities and new levels of confidence and self-belief.

CONTEXTS

- 1) University stimulating innovation
- 2) School's desire for on-line courses for industry
- 3) e-Centre's need for exemplar courses
- 4) Linda's desire to challenge herself by doing something she had not done before.

ECOLOGIES OF PRACTICE IN ORGANIZATIONS?

“We do not learn from experience—we learn from reflecting on experience”
(John Dewey 1916)

It is more beneficial to articulate and codify experience than accumulate similar additional experience. What is learned through reflection can lead to enhanced performance through increased self-efficacy.

(Stefano et al (2016) Making Experience Count: The role of reflection in individual learning Working Paper 14-093 Harvard Business School)

Metacognition is essential to the epistemology of practice & self-regulatory models of learning at the core of an ecology of practice

Gaining a footing in the landscape of learning ecologies requires us to dive into the landscape and spend time reflecting on and analyzing our own experiences. Like the geologist, the first step in understanding an unknown landscape is to map it.

WORKFLOW LEARNING 70:20:10 MODEL OF SITUATED LEARNING



Arun Pradhan



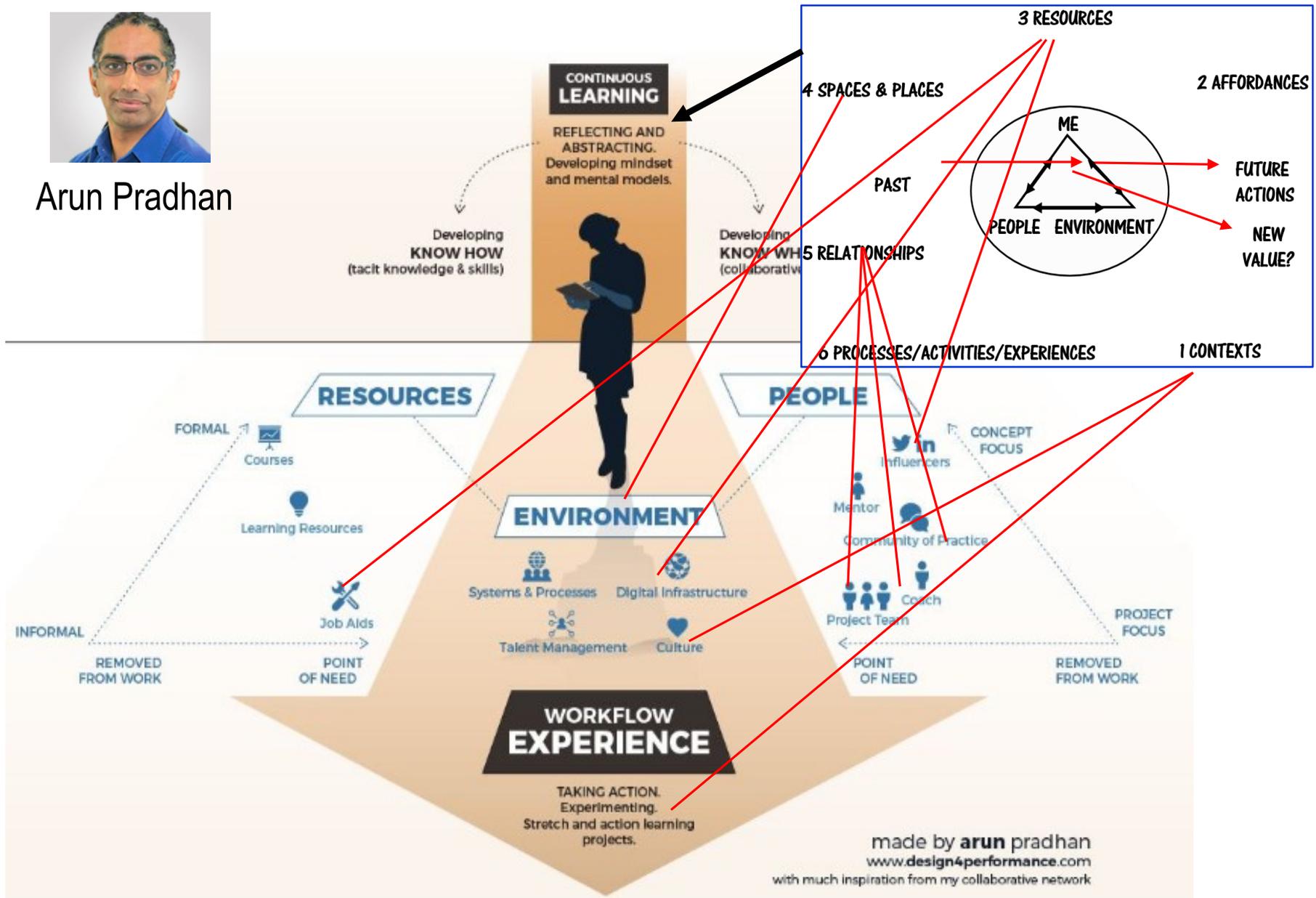
Pradhan, A. (2017) Reframing 70:20:10, The Anatomy of Workflow Learning

<http://design4performance.com/2017/01/28/reframing-702010-the-anatomy-of-workflow-learning/>

ECOLOGIES OF PRACTICE & WORKFLOW LEARNING?



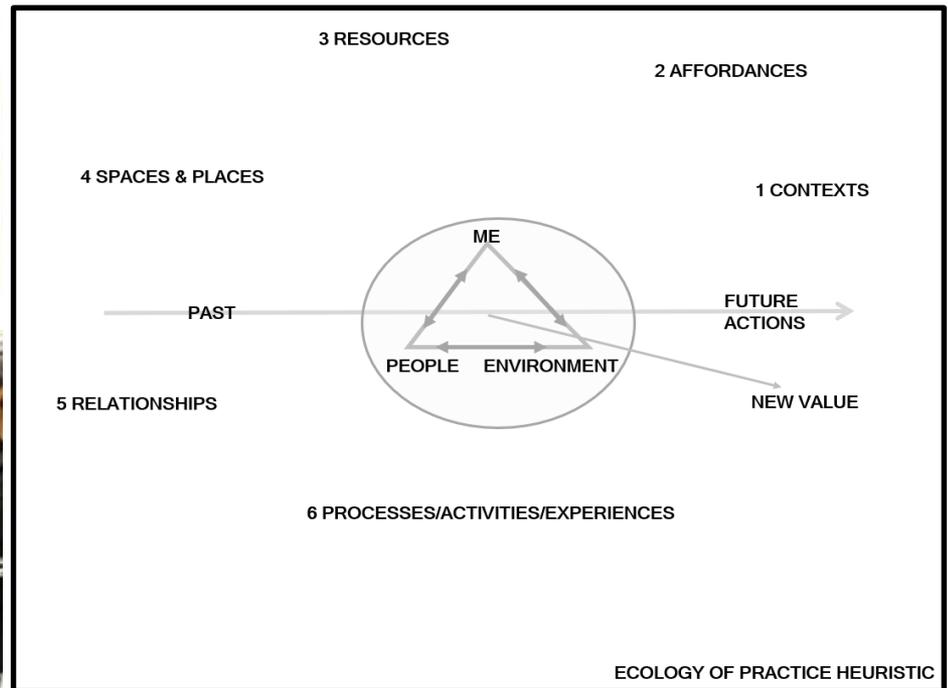
Arun Pradhan



LILA ECOLOGY FOR LEARNING



A DAY IN THE LIFE OF OUR LEARNING ECOLOGIES

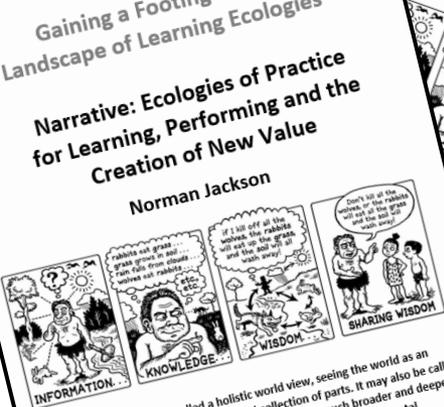


THANK YOU

Gaining a Footing in the Landscape of Learning Ecologies

Narrative: Ecologies of Practice for Learning, Performing and the Creation of New Value

Norman Jackson



INFORMATION **KNOWLEDGE** **WISDOM** **SHARING WISDOM**

The new paradigm may be called a holistic world view, seeing the world as an integrated whole rather than a dissociated collection of parts. It may also be called an ecological view, if the term "ecological" is used in a much broader and deeper sense than usual. Deep ecological awareness recognizes the fundamental interdependence of all phenomena. Fritjof Capra

Learning Ecologies Website
<https://ecollia.weebly.com/>

Gaining a Footing in the Landscape of Learning Ecologies

A Guide to Mapping Ecologies of Practice for Learning, Creativity & Performance at Work

Norman Jackson



KNOWLEDGE **WISDOM** **SHARING WISDOM** **KNOWLEDGE**

...we learn from reflecting on experience"

"codify experience than accumulate
learned through reflection can lead to
of self-efficacy. (Stefano et al (2016)
action in individual learning
website

Exploring Learning Ecologies



INFORMATION **KNOWLEDGE**

rabbits eat grass...
grass grows in soil...
rain falls from clouds...
wolves eat rabbits...
etc. etc.

if I kill off all the
wolves, the rabbits
will eat up the grass
and the soil will
wash away

Ecologies for Learning and Practice

Emerging Ideas, Sightings, and Possibilities



EDITED BY RONALD BARNETT AND NORMAN JACKSON