



Exploring the Ecology of Teaching & Learning in Higher Education

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assisted by Eleanor Hannan

Prior to the conversation it would be helpful if you could create a short (~200 word) narrative or annotated sketch of a teaching /learning situation in which you have tried to encourage students to use their creativity. This will provide a resource that can be used to evaluate the ecological framework during the session.

LEARNING FOR A COMPLEX WORLD

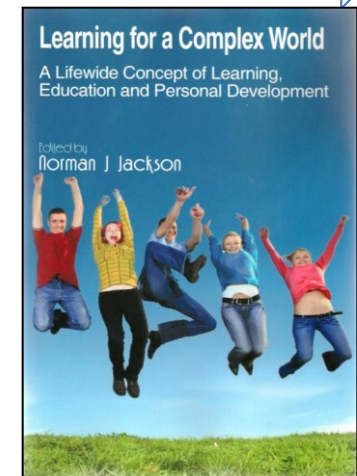


Our learning, development, achievement (including our creativity) are distributed through all parts of our life

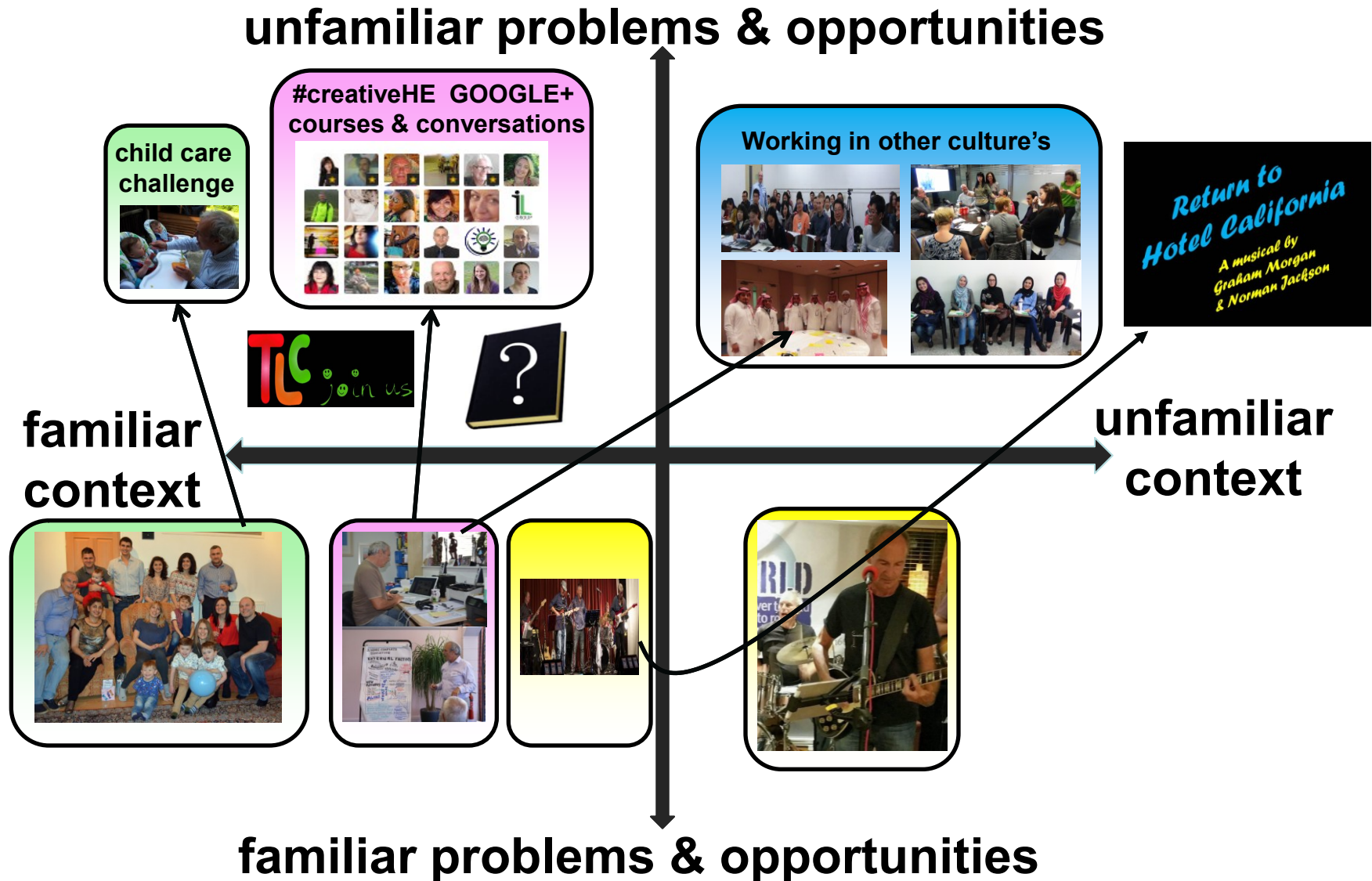


LIFEWIDE LEARNING >>>>> Now, All, Personal & Significant

Formal /non-formal	&	Informal
Intended	&	Unanticipated
Need	&	Interest
Directed	&	Self-directed
Planned	&	Emergent
Extrinsic Motivation	&	Intrinsic Motivation



Sites of greatest affordance for learning, creativity and other achievements are contexts that are unfamiliar or unknown to us



All living things inhabit an ecosystem



an ecosystem comprises the complex set of relationships and interactions among the inhabitants, resources and habitats of a particular environment for the purpose of living

People inhabit different eco-social systems (Jay Lemke)



office ecosystem in business ecosystem



surgical ecosystem in hospital
ecosystem in health care ecosystem



car mechanics ecosystem in
formula car racing ecosystem



architectural design ecosystem in
building and construction ecosystem

An eco-social system comprises the complex set of relationships and interactions among the human inhabitants, resources and habitats of an environment for the purpose of living > producing, creating, learning, developing and achieving (and more....)

Within an educational ecosocial system like a school, teachers create ecologies within which pupils learn, develop & achieve.
What are the components in this ecology for learning?



What are the components of this ecology for learning?

CONTEXT

early years school culture

PEOPLE - *teacher, pupils, TA's and pupils parents*

PURPOSE – *learning about things/ learning how to learn /values & social stuff*

SPACES

*Physical – classroom/ school
Social
Emotional
Intellectual
Creative*

RELATIONSHIPS

*teacher/TA's – pupils
pupils-pupils
teacher – parents
parents- children
with subject,
environment,
materials, activities*



RESOURCES (knowledge, tools, materials, technologies) *teacher's/ TA's knowledge, pupils' experiences, books, learning aids, posters/pictures, musical instruments, writing materials, pupils' work, internet*

AFFORDANCES

teacher creates affordance for learning & enables pupils to see and use opportunities

CONTENT

teacher determines what is to be learnt

PROCESS

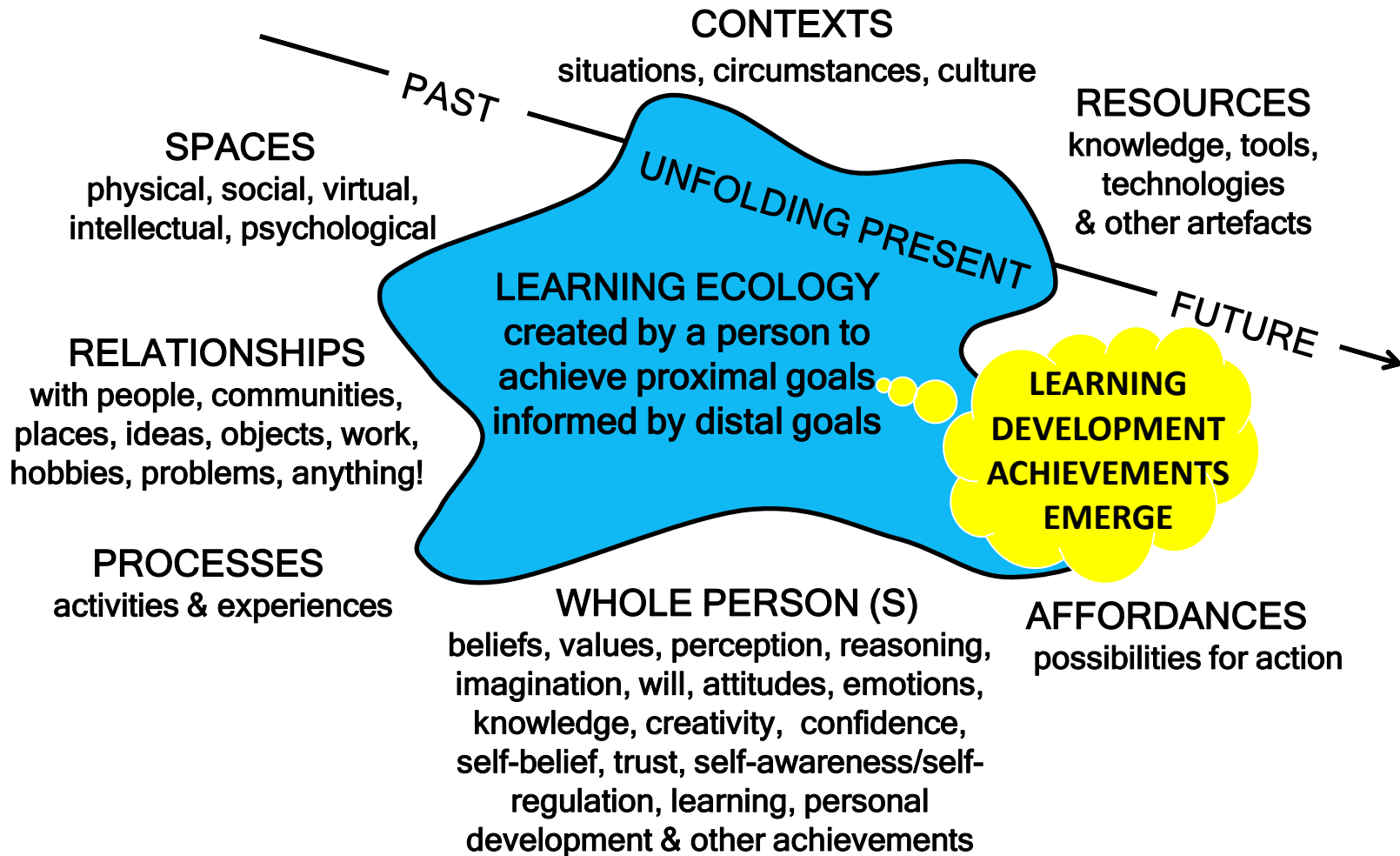
teacher determines how content is learnt through activities

OUTCOMES

teacher determines what has been achieved through observation, questions & assessment

LEARNING ECOLOGY CONCEPTUAL MODEL

can this framework be applied to any learning context?



An ecological perspective on personal creativity



Personal creativity is

'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'

Carl Rogers (1960)

NOTES

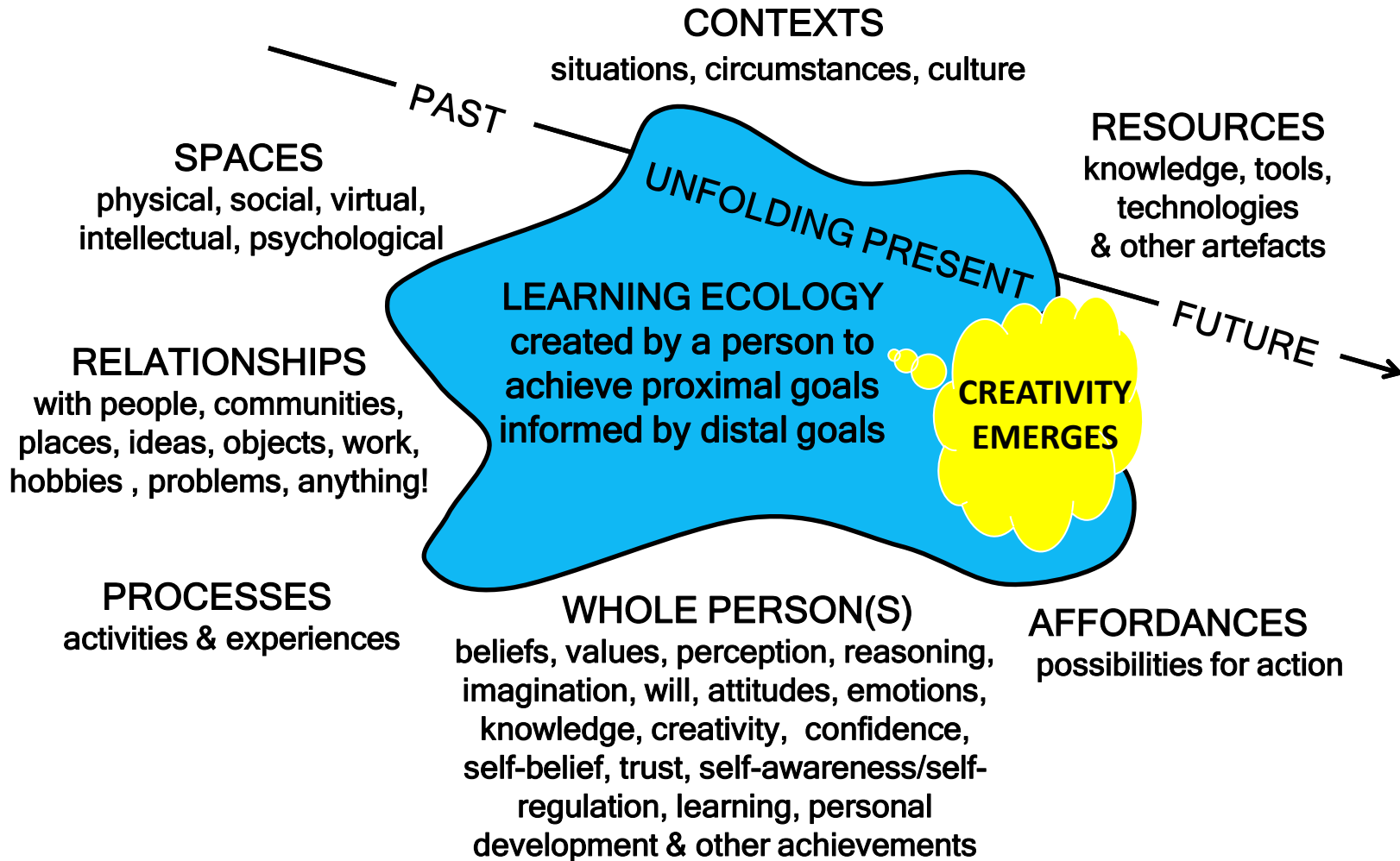
product = ideas, material or virtual objects, practices, performances, relationships, processes and more.....

originality emerges from our uniqueness as individuals, relating, caring and thinking about things in our contexts, in the ways that only we can

creativity is often the result of making a third 'thing' from two existing things or ideas, rather than making something from nothing 1+1=3!
McWilliam and Taylor (2016)

LEARNING ECOLOGY CONCEPTUAL MODEL

can this framework be applied to any learning context?



Higher Education teachers create ecologies for students' learning & development within the institutional learning environment (ecosystem)

CONTEXT

HE course / culture

PEOPLE

teacher & students

PURPOSE – *learning a subject/skills
learning to think/behave like.....*

SPACES

*physical
virtual
intellectual
psychological*

RELATIONSHIPS

*teacher -students
students & peers
students & others
who support their
learning. With*

subject, resources/tools, spaces, activities & problems

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



AFFORDANCES

*teachers create
opportunities for
learning. Students
must utilise these
affordances to benefit*

CONTENT & PROCESS

*teacher determines
what content & how/
when it is learnt*

OUTCOMES

*teacher determines
what has been learnt thro'
observation, questions
& assessment*

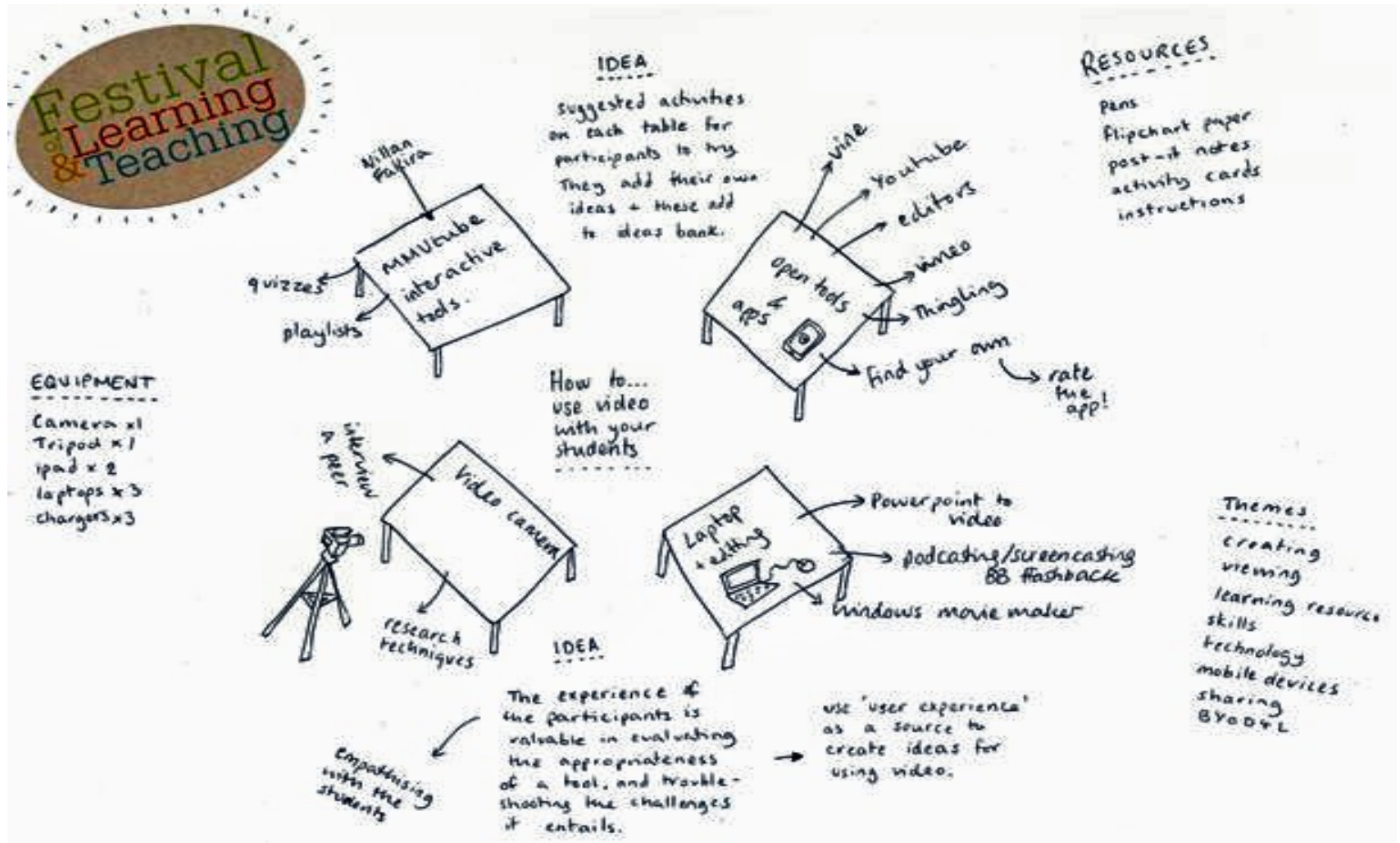


Eleanor Hannan (MMU Centre for Learning and Teaching)

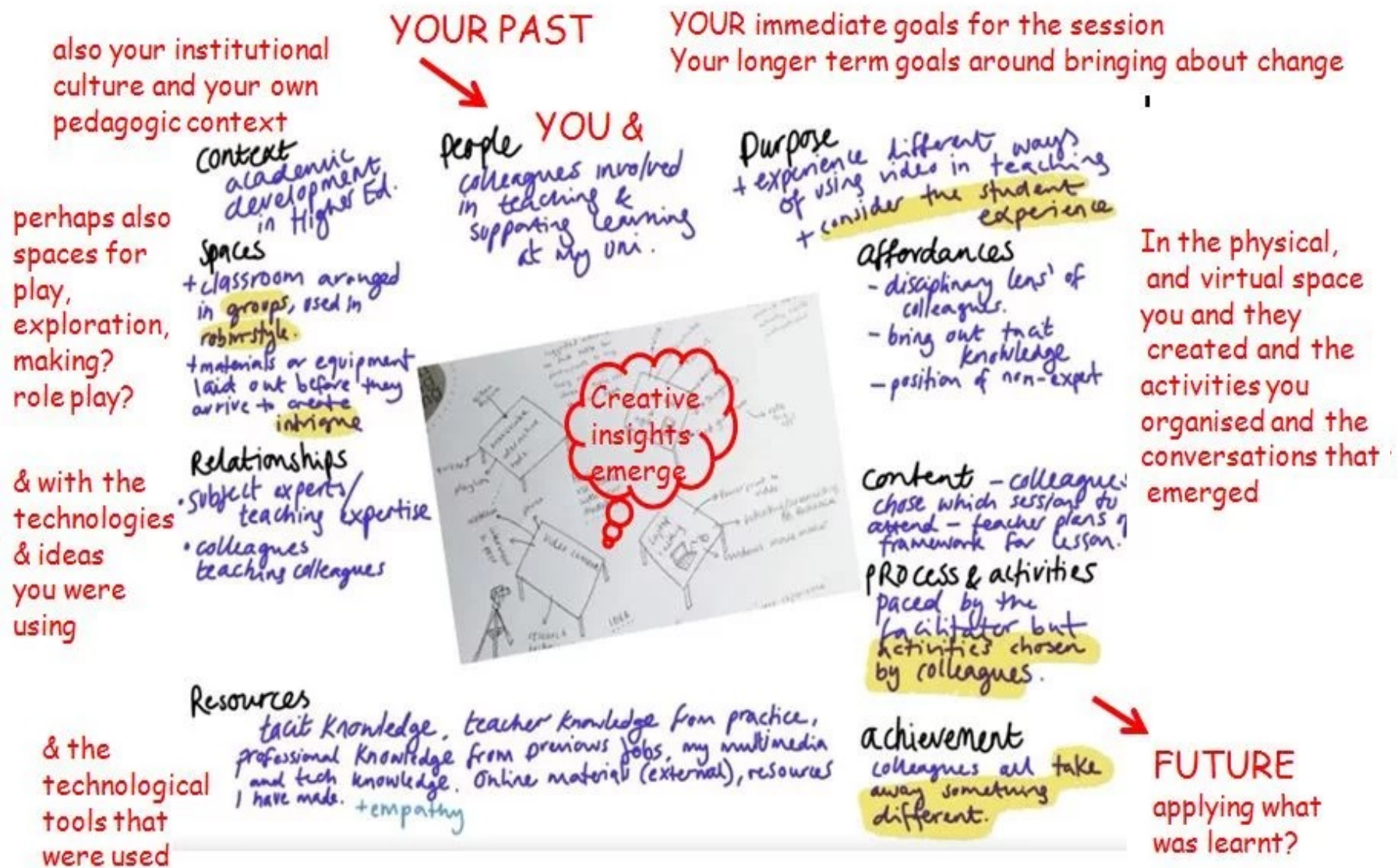
Interpreting my pedagogic practices through the lens of creative learning ecologies.

Creative Academic Magazine 7B <http://www.creativeacademic.uk/magazine.html>

<https://www.youtube.com/watch?v=0lgEQNAHXLc&feature=youtu.be>



Ellie's ecology for learning and empathising – an ecology with high practical/emotional content



5 min reflective activity

Q1 Can the learning ecology framework be applied to your own narratives / experiences of trying to encourage students to learn and use their creativity?

If you haven't prepared a narrative in advance. Think of an experience when you have tried to encourage students' to use their creativity. Sketch out the key elements of your approach and try to see if they can be mapped onto the learning ecology framework in a meaningful way.

Don't worry about completing this activity in 5mins you can share your evaluation after the session at:

<https://www.surveymonkey.co.uk/r/6BDWH9K>



**'in order to understand human development,
one must consider the entire ecological
system in which growth occurs'
(Urie Bronfenbrenner 1994)**

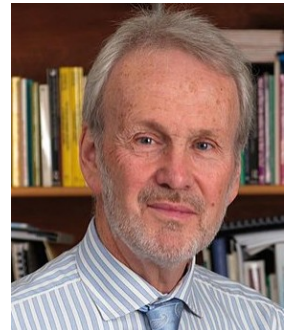
ECOSYSTEMS THEORY

The ecological affordance of pedagogy

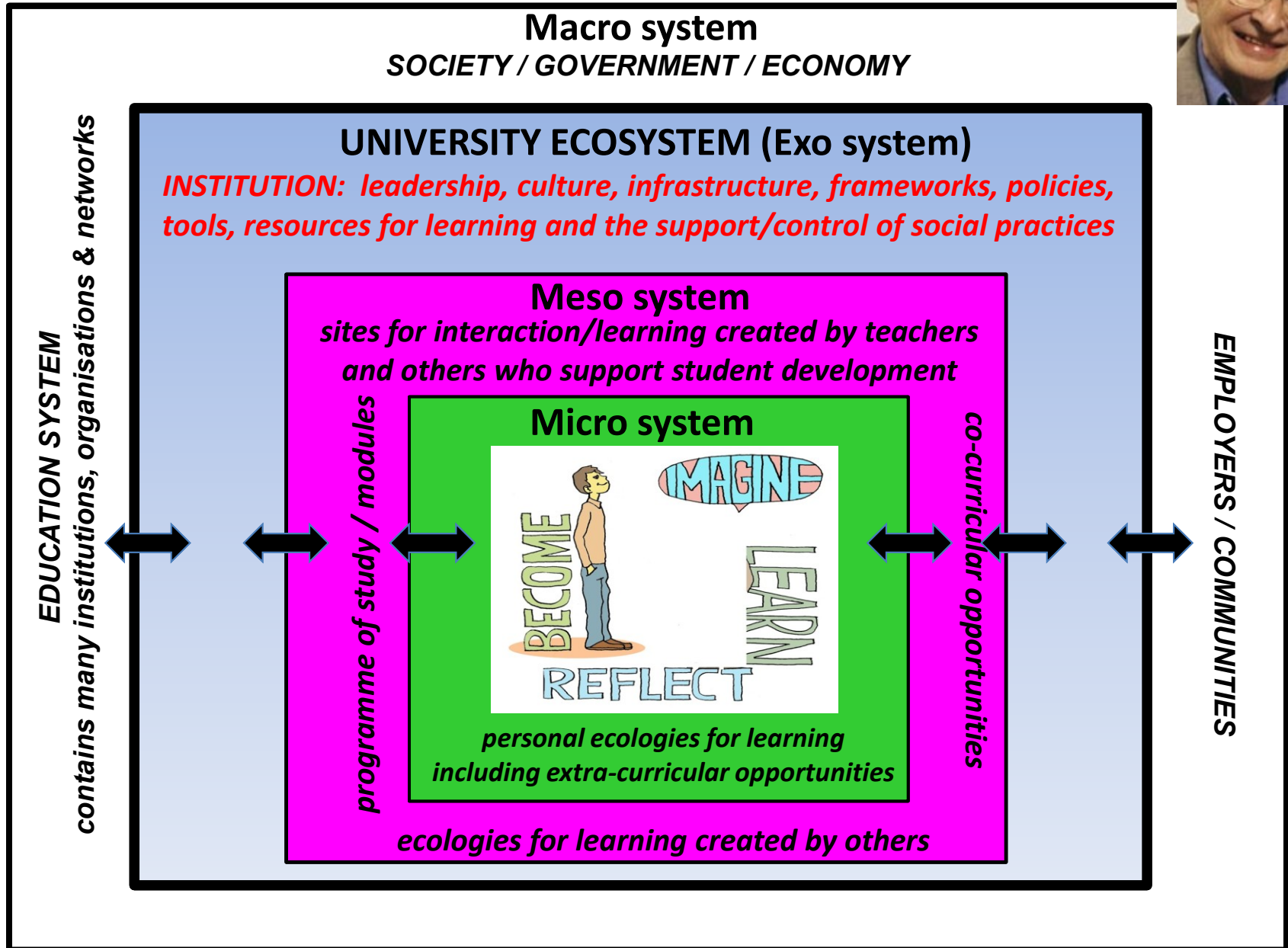
Pedagogy is more than teaching method, more than curriculum, more than assessment practice. It is all these things, but it is also how they are made into patterns of actions, activities and interactions by a particular teacher, with a particular group of students [in a particular context]

The concept of pedagogy encompasses relationships, conversations, learning environments, rules, norms and culture within the wider social context and may extend beyond school to community and public settings. It takes in the ways in which what teachers and students do is framed and delimited within a specific site, a [cultural and] policy regime and the historical context.

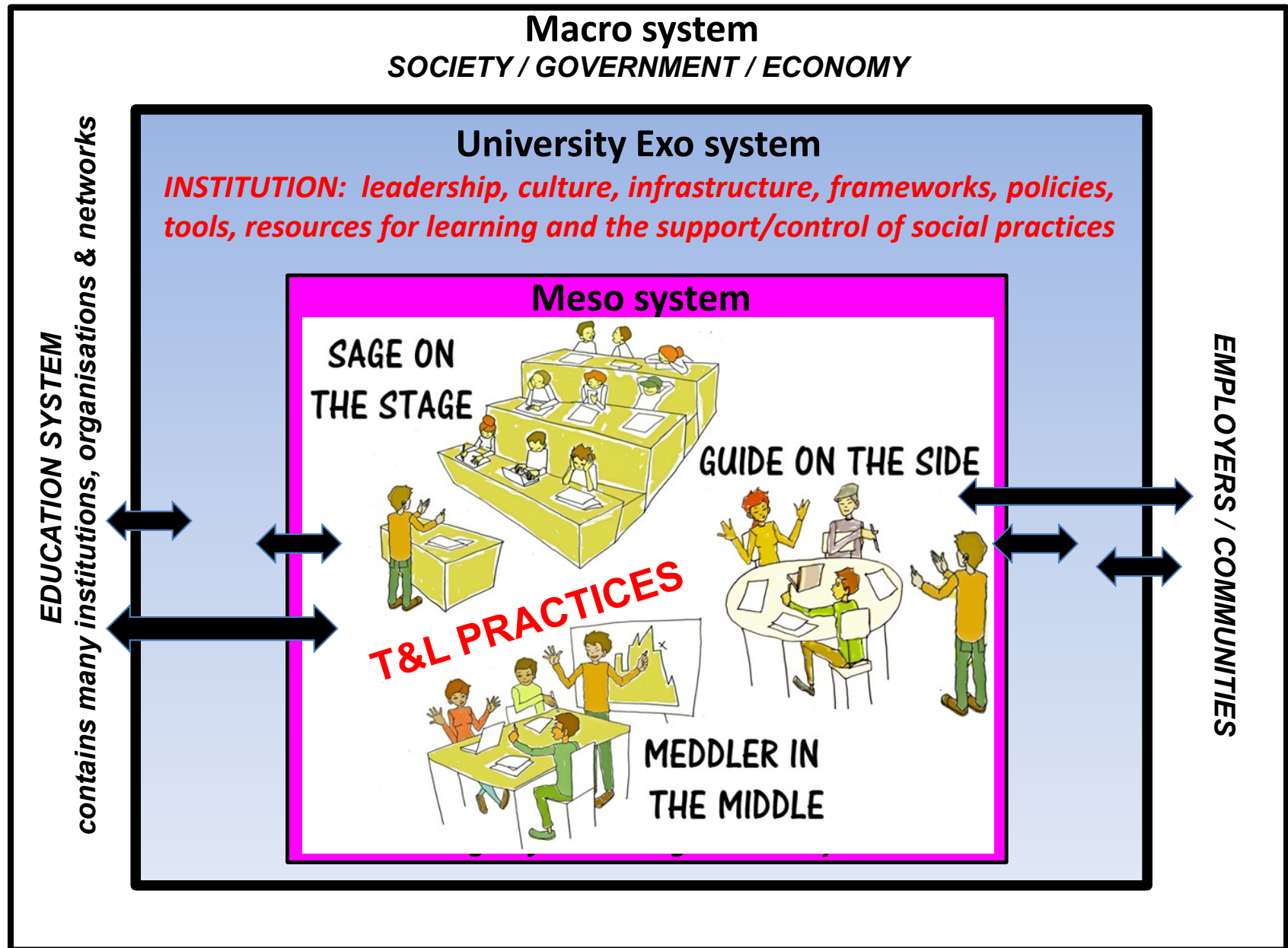
Robin Alexander (2008)
Essays on Pedagogy
London: Routledge



ECOSYSTEM MODEL (Bronfenbrenner 1999)



Pedagogy connects what happens in the classroom to the whole ecosocial system





**LEARNING TO
BE & BECOME....**

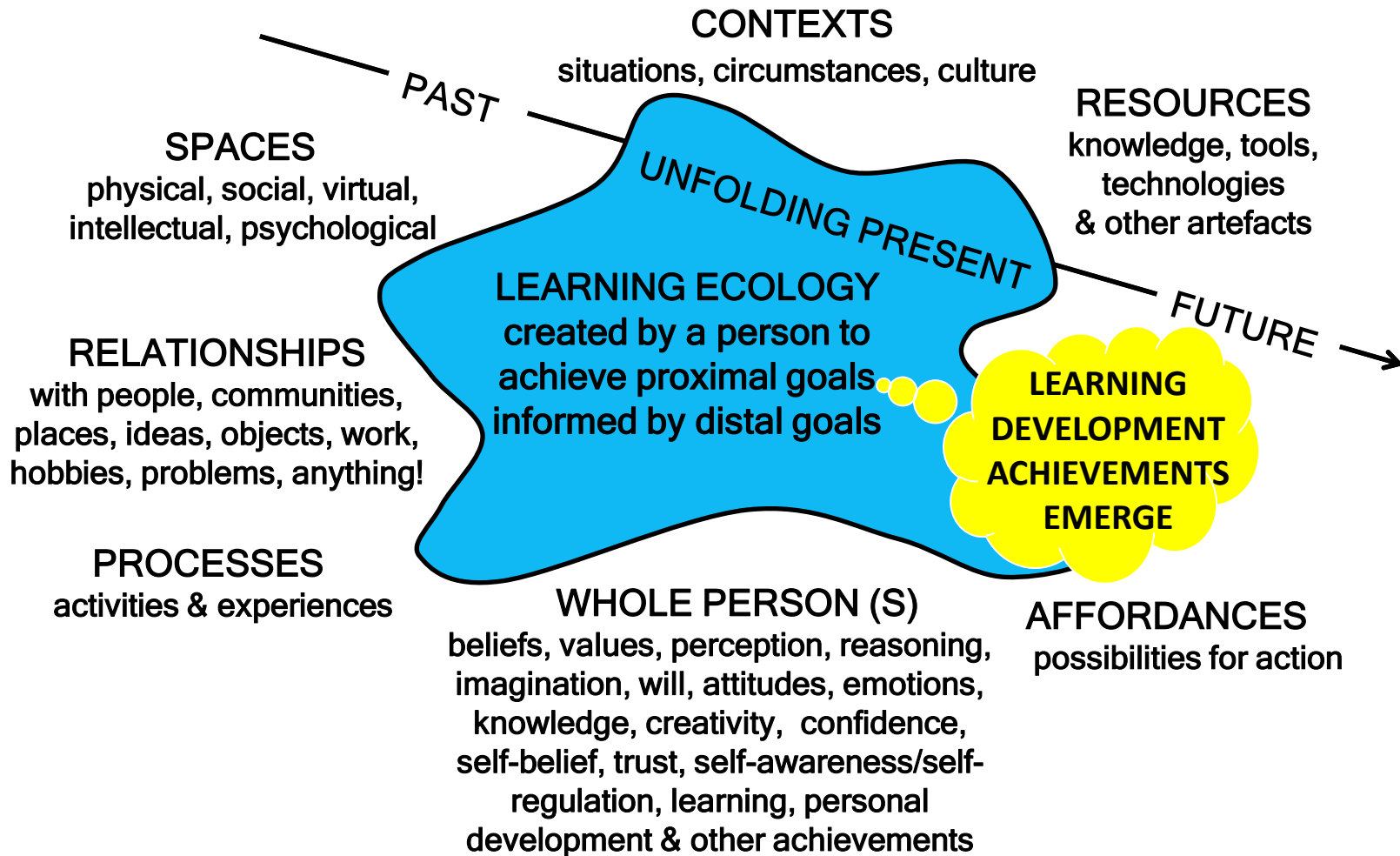


PROFESSIONAL/VOCATIONAL SIGNATURE PEDAGOGIES
eg architect, engineer, doctor & lawyer

**DISCIPLINARY
SIGNATURE
PEDAGOGIES**
think like a
physicist,
historian
psychologist
other academic
discipline

LEARNING ECOLOGY CONCEPTUAL MODEL

can this framework adequately describe the complexity and diversity of a HE teachers' pedagogic practices?



Representation of a teacher's pedagogic practices using the learning ecology framework

PAST

RELATIONSHIPS

Between learners & teachers & others who support learning, between people and ideas, spaces and things

PEDAGOGIC CONTEXTS

Curriculum, Discipline, Teaching stance eg 'Sage', 'Guide' 'Meddler', 'Modeller' Problems, Challenges & Opportunities – aims, objectives, intended outcomes, activities, feedback, assessment

CULTURAL CONTEXTS

Course Team
Disciplinary,
Departmental
Institutional

INSTITUTIONAL ECOSYSTEM



INSTITUTIONAL ECOSYSTEM

RESOURCES

Knowledge, Technology Equipment, Materials, Tools & other artefacts Learning support

SPACES

Classroom, labs, studios, theatres, field, social. physical, virtual cognitive/emotional

AFFORDANCE FOR LEARNING & ACHIEVEMENT

Provided by teacher/institution
Discovered and or created by learners

FUTURE?

Do these ideas make sense to you?

**Do they make sense in relation to
your own pedagogic narrative?**

***I am looking for practitioners willing to explore these
ideas in the context of their own pedagogic practices.
If you would like to collaborate by sharing your
own pedagogic narrative, please get in touch***

Ecologies for Learning

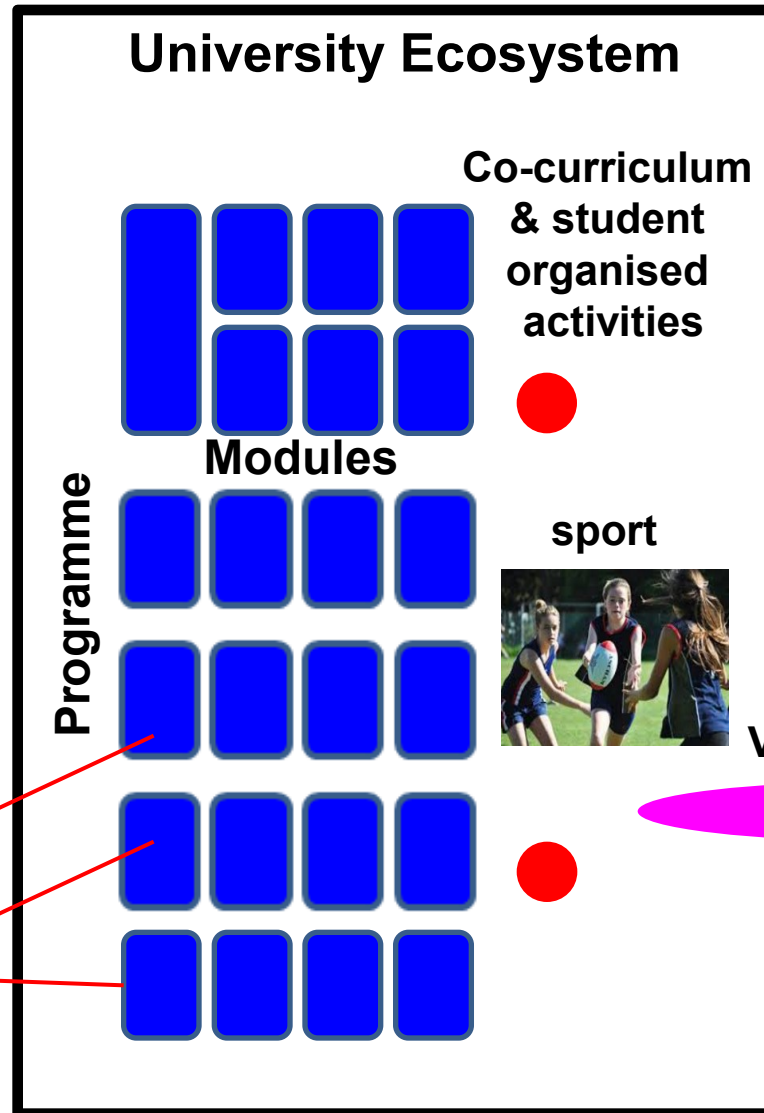
A students' perspective

becoming the person you want to be

Ecologies for learning, developing & achieving occur at all scales & in all parts of a students' life

Students' higher education experiences can be visualised as a constellation of ecologies for learning.

Mostly shaped/created by teachers & institution some by students, and some by organisations outside the university



Macro system

'Living'



PT work



Travel



Volunteering



CONTEXT
HE course

PEOPLE
teacher & students

PURPOSE – learning a subject,
learning to be a.... developing skills

SPACES
physical
virtual
intellectual
psychological

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

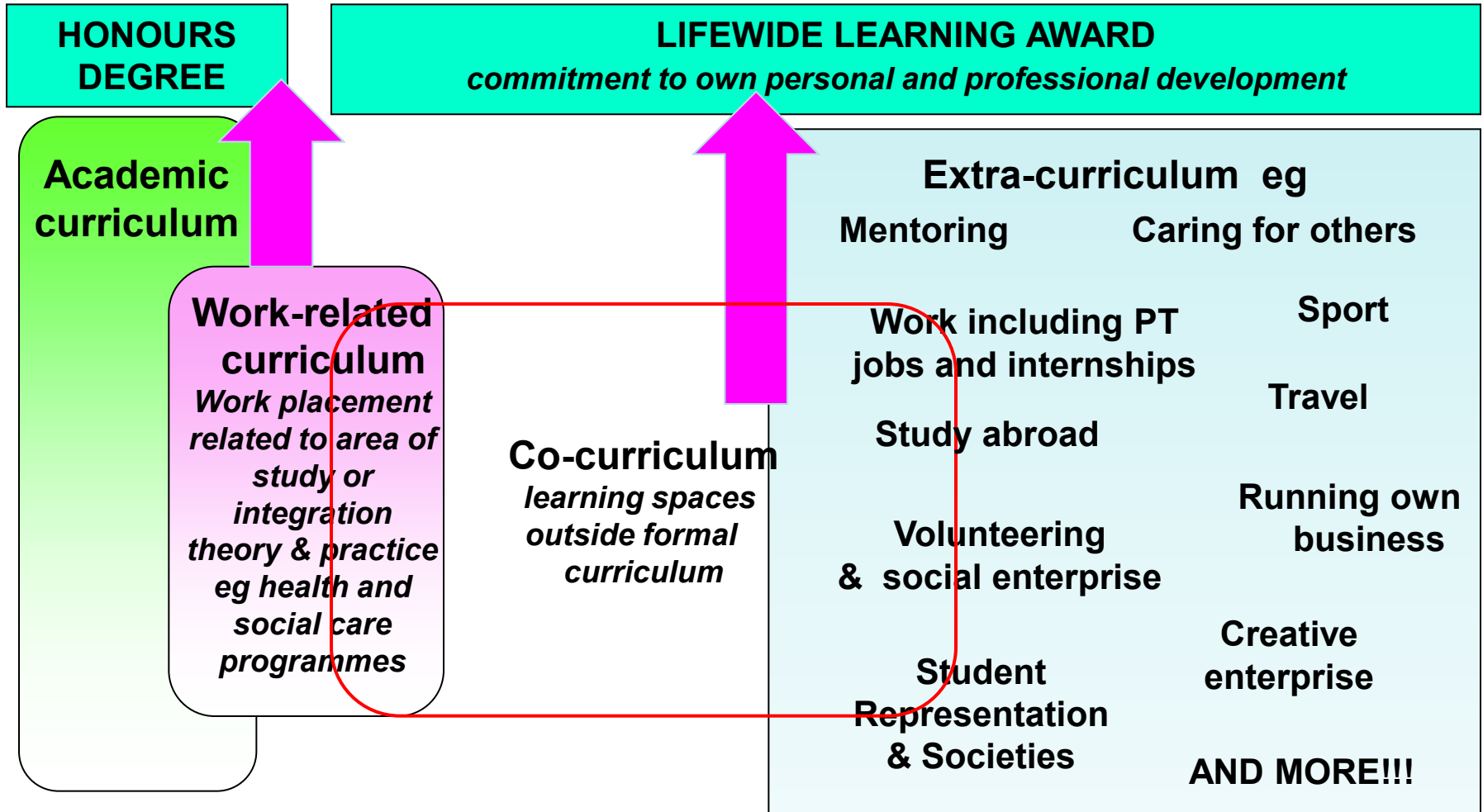
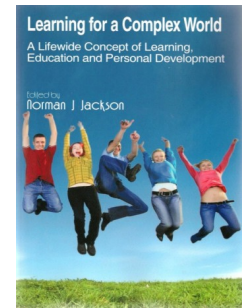
RESOURCES (knowledge, tools, artefacts, technologies)
teachers' embodied knowledge, students knowledge &
experiences, explicit knowledge in books/ articles,
internet resources



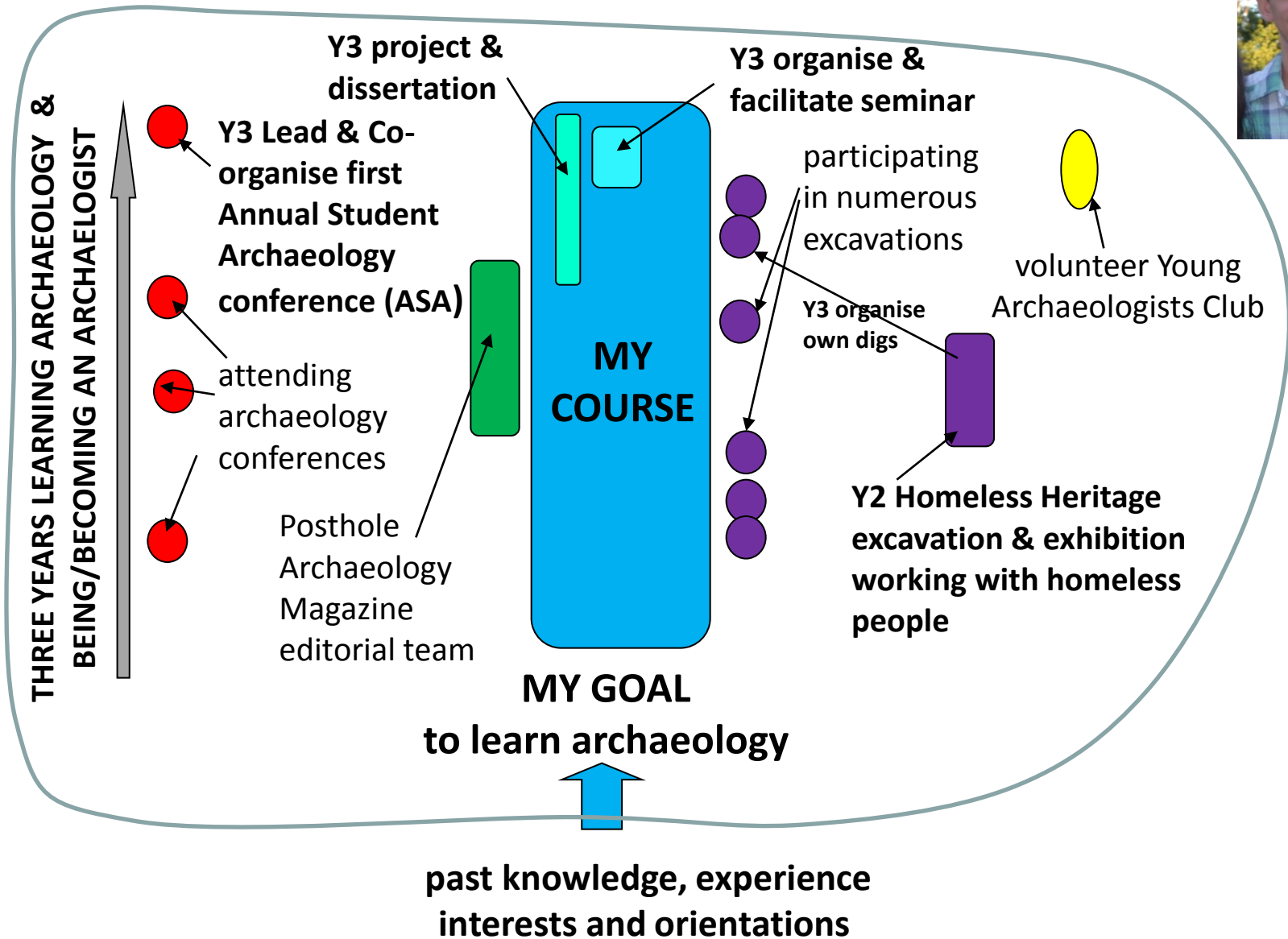
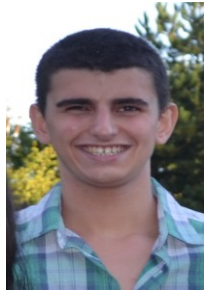
AFFORDANCES
In their courses,
teachers create
opportunities for
learning. Students
must utilise these
affordances to benefit

Ecologies for learning occur at all scales & in all parts of a students' higher education experience

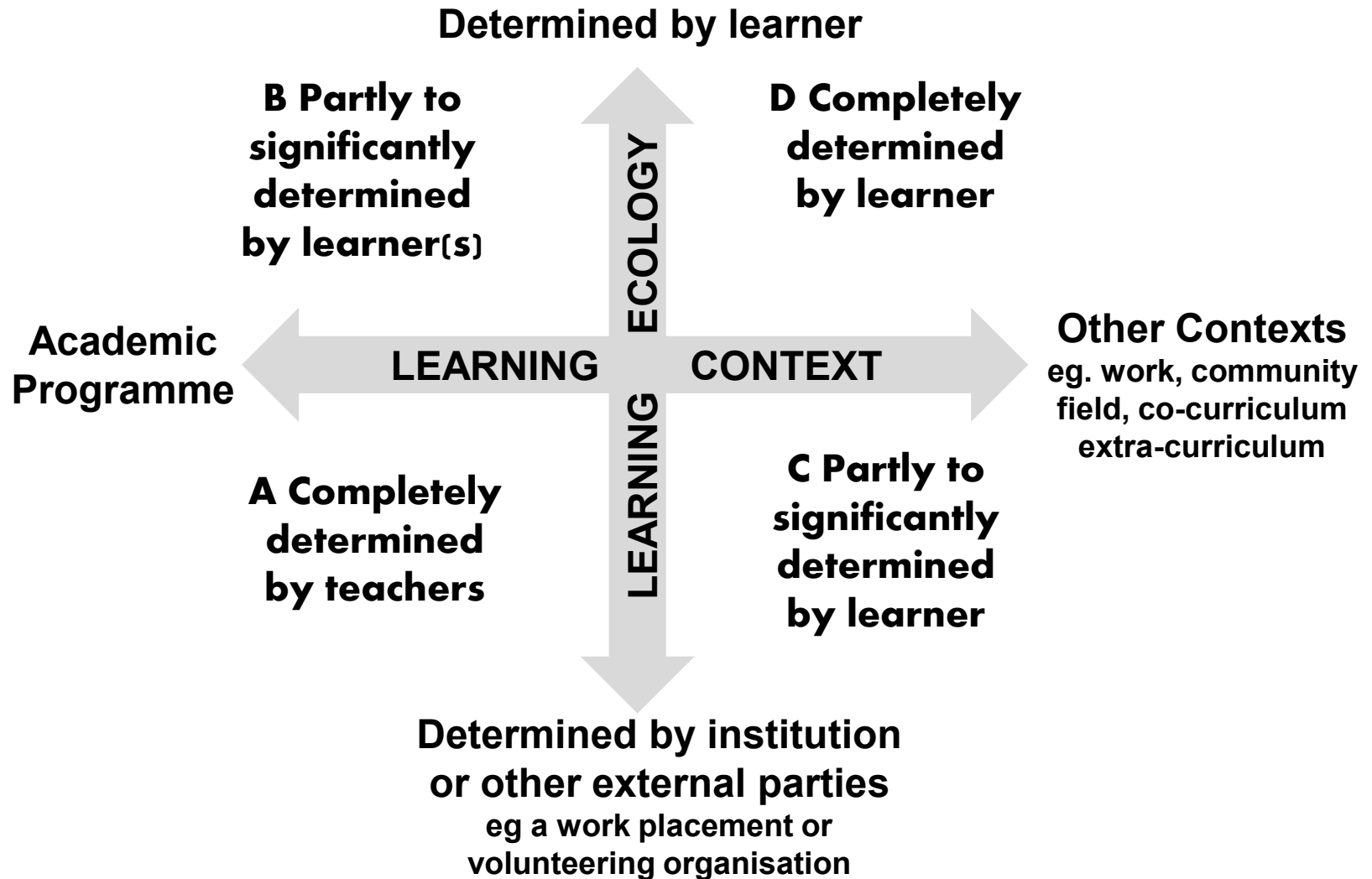
To accommodate all the affordances for learning in a students' life we need to adopt Lifewide Curriculum



A student's ecologies for learning, developing & achieving *'becoming the archaeologist I want to be'*

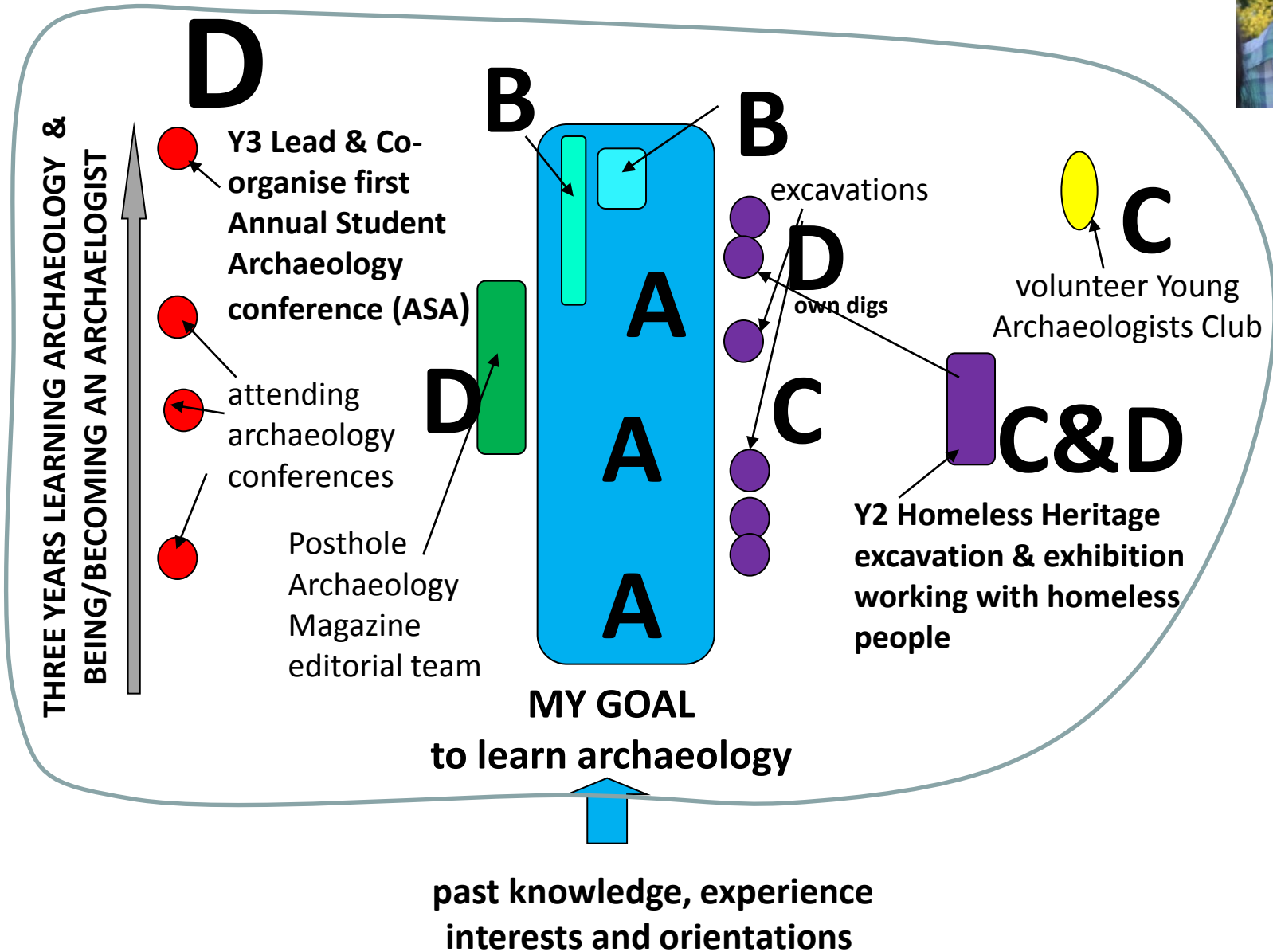
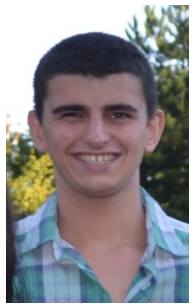


Conceptual tool for making sense of a students ecologies for learning, developing & achieving



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

Learning ecologies involved in *becoming the archaeologist I want to be*



Does the idea of viewing learning ecologies from the learner's perspective make sense to you?

How could higher education make use of an ecological perspective on teaching and learning?

I am gathering feedback on these ideas through an anonymous online questionnaire. If you can find the time I would be very grateful for your thoughts. We can provide a link to the results on the TLC website.

You can access the survey at:

<https://www.surveymonkey.co.uk/r/6BDWH9K>

Thank You



Lifewide Education

<http://www.lifewideeducation.uk/>

Exploring Learning Ecologies

<https://www.lulu.com/>



Creative Academic

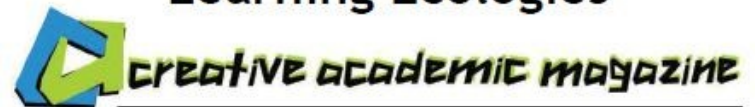
<http://www.creativeacademic.uk/>

Exploring Creative Pedagogies

<http://www.creativeacademic.uk/creative-pedagogies.html>



**Exploring Creative
Pedagogies for Creative
Learning Ecologies**



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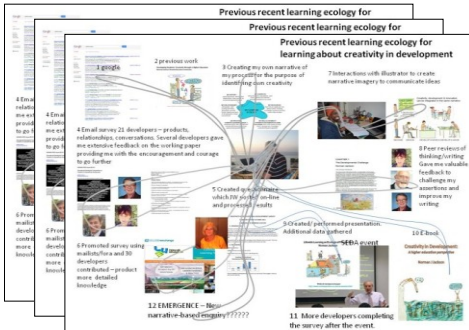
CREATIVE ACADEMIC MAGAZINE Issue 7 From October 2016-2017 <http://www.creativeacademic.uk>

Presentation and links

<http://www.normanjackson.co.uk/tlc.html>

My Learning Ecology

PAST



RESOURCES



Workshops eg MMU, Derby, SHU
Powerpoint + Handout
Mediating Artefact



SPACES

AFFORDANCE
RELATIONSHIPS

CONTEXTS



PURPOSES

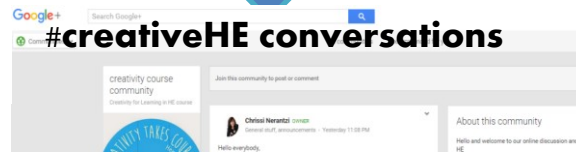
SPACES

ME



LEARNING

SPACES



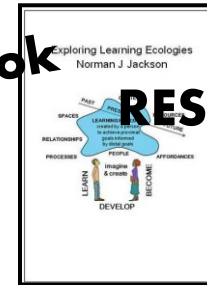
AFFORDANCE



PROCESS

How I relate/connect/
interact with everything

my book



RESOURCES



authors



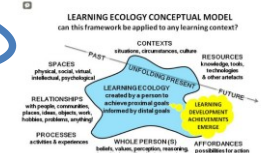
AFFORDANCE RELATIONSHIPS

Tools

Powerpoint
Mediating Artefact



Online questionnaire



FUTURE?