

Learning for Our Life and a More Sustainable Future Norman Jackson

1 Preamble

It's a pleasure and an honour to be given this opportunity to contribute to your symposium on the theme of learning for life.

There is something profound about connecting learning to life itself and the words and ambiguity in the title you have chosen holds much potential for the exploration of ideas.

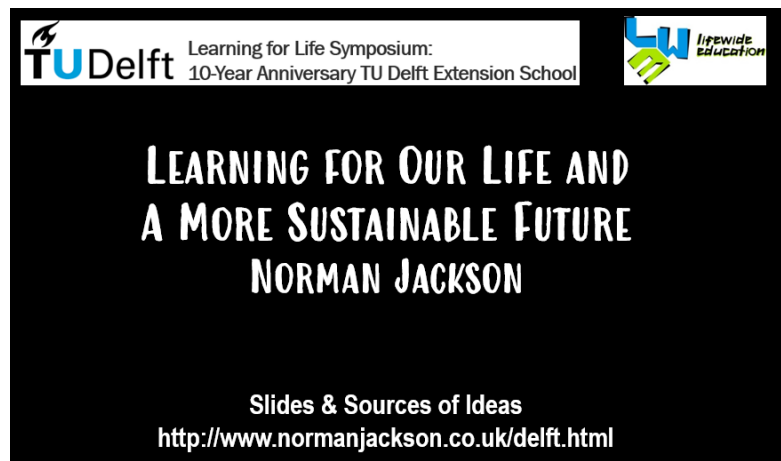
Learning for life is absolutely necessary but it is only part of the story. The bigger story involves

learning through life. The active part of life is living -the things that organisms do in order to exist. Arne Carleson (2014) suggests that the very idea of lifelong learning is the integration of learning and living which neatly embraces the idea of learning for and learning through life. I will argue that it makes no sense to see learning for and learning through our life as separate things. We integrate all our learning through living and we use whatever we can when confronted with new situations, problems and opportunities.

For most organisms living is directed to survival – feeding, avoiding or dealing with predators, and finding a mate and reproducing. But the way humans live extends living to a multitude of purposes that can only be achieved through learning how to achieve them. The link between learning and purpose in the form of learning to live a particular sort of life, and then learning through that sort of life as it lived, is a theme I will explore.

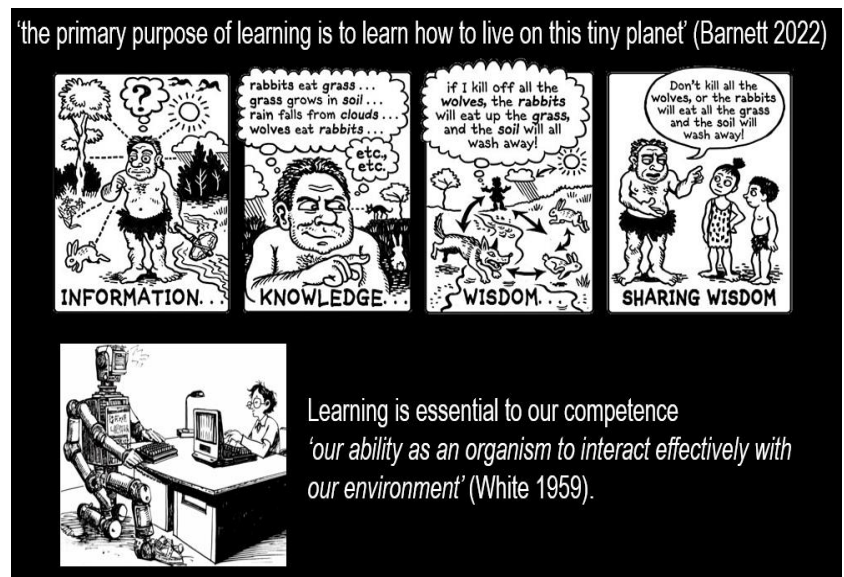
The title begs the question whose life? Is it just our own life, or does it include the lives of others or even other living things that are not human? I want to develop the idea that humans need to pay more attention to the needs of other living things, in the context of creating a future that is more sustainable than the one we are currently heading for.

I'm going to engage with the idea of *learning for and through life* through a narrative that emphasises the lifewide and ecological nature of living, learning, acting and becoming in particular contexts and environments. I am going to personalise my narrative and try to demonstrate that fundamentally our lifelong journey of becoming/forming, in which our learning is embedded, involves a never ending search for and discovery of meaning that is unique to each and everyone of us. I will also try to show that learning and practice and the meaning that grows through the multitude of situations we inhabit, are ecological in nature and I will try to explain why a lifewide-ecological concept of lifelong learning is important in the context learning for our life now and in the future, and our need, as a species, to lay the foundations for a more sustainable future



2 Learning for life – learning to live

According to educational theorists Ron Barnett *'the primary purpose of learning is to learn how to live on this tiny planet'* (Barnett 2022) and this applies to the whole of our 300,000 years of modern human existence. For hunter gatherers it was essential to learn how their world was connected and how what they did impacted, on the world around them. And this is exactly the same today at the threshold of when humans themselves are likely to become part machine, as we struggle to comprehend how we might make creative and productive use of AI.



We have to understand the effects of what we are doing, we have to learn how to live on this tiny planet.

With this in mind, we need to reconnect with the early 20th century educational theorists and practitioners who maintained that *'the whole of life affords us the opportunity to learn and form'*. Arne Carlsen, former Director UNESCO Institute for Lifelong Learning echoes this idea in his succinct explanation of what lifelong learning means: *'lifelong learning is the integration of learning and living, covering lifelong (cradle to grave) and lifewide learning for people of all ages, delivered, undertaken [and experienced] through a variety of modalities (formal, non-formal and informal) which together meet a wide range of learning needs and demands.'* (Carlsen 2014).

This seems like a sensible proposition. Learning for life and for living is the most complete and useful relationship we can recognise between our learning and ourselves. We learn in order to live a certain sort of life in a particular environment(s) and our learning emerges, whether we like it or not, as a result of participating in that life.

3 Learning for Life - our competence to live different sorts of lives

But learning by itself is not enough, we need to develop competence to live a certain sort of life – for example the life of a school teacher. The original definition of competence was biological rather than specifically human, *"an organism's capacity to interact effectively with its environment"* (White 1959) and I am going to use this definition to underpin an ecological concept of practice.

In order to interact effectively with a particular sort of environment, such as a teacher might interact in her classroom, we need to understand what the flows of information from the environment mean. Much of our learning is geared to understanding what things mean and the function of making meaning is to enable us to interact and adapt to our environment and enhance our ability to alter the environment to make it more useful to what we are trying to achieve (Zittouni & Brinkmann 2012 p1809)

In their review of the idea of competence for educational settings, Vitello, Greatorex & Shaw (2021 p4) begin to sketch out a concept of competence as an act of performing successfully (interacting effectively) in particular environments, *"Competence is the ability to integrate and apply contextually-appropriate*

knowledge, skills and psychosocial factors (e.g., beliefs, attitudes, values and motivations) to consistently perform successfully within a specified domain.”

But learning is implicit in this definition – in order to perform in competent ways we have to learn how to do it. The definition focuses on performance in the present but it omits the role of learning in enabling better performance in real time as we learn while engaging in a task (learning as we live). It also neglects the fact that as organisms we have the ability to recall events and think about them again as we gain deeper insights or work out what went wrong or how we might

have done things better. So we need to incorporate learning into this definition for example by including an expression like, *and having the will, confidence, self-regulatory habits and resilience to learn and develop.*

COMPETENCE TO LIVE A CERTAIN SORT OF LIFE
Vitello, Grotorex & Shaw (2021)

“Competence is the ability to integrate and apply contextually-appropriate knowledge, skills and psychosocial factors (e.g., beliefs, attitudes, values and motivations) to consistently perform successfully within a specified domain”

my suggestion for a learning/adaptation/growth
with the will, confidence, self-regulatory habits and resilience to learn, develop and achieve, even in conditions of uncertainty or lack of success.

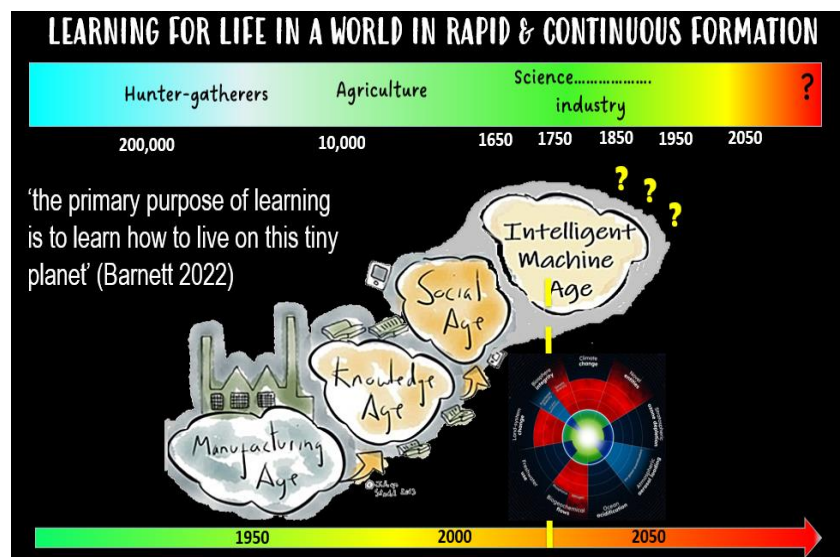
This addition recognises that competence involves a commitment to learn and develop through our experiences of trying to perform and achieve so that our evolving competence becomes integral to our ongoing formation as a human being. It also means that having this form of general competence in which a commitment to learning is embedded, we are more likely to be able to adapt to new and novel situations and learn to perform in an expanding range of contexts. How we learn to be competent in an expanding range of contexts is by participating in those contexts with the awareness and capability to learn from the experience.

4 Learning for life – a world in rapid formation

The task of learning how to live on this tiny planet has been a primary feature of human evolutionary history but the present compared to the distant past is characterised by the speed and complexity of change in human made and modified natural environments as technological advances are made compared to our earlier evolution.

If we take the last 70 years enormous changes that have taken place in the developed

economies as we advanced through the century and migrated from manufacturing into service and knowledge based economies assisted by the introduction of new communication technologies, an entirely new communication infrastructure – the world wide web and now into the era of artificial intelligence.



Many of you will have experienced some of the changes or perhaps witnessed your parents going through them. It's self-evident that individuals, organisations and societies have had to undertake vast amounts of learning and adaptation in order to transition to a knowledge economy. It is not therefore surprising that the focus on learning in the service of the economy and employability has come to dominate the discourse about lifelong learning especially from the mid 1990s. The question we need to ask is, *what else do we need to consider in order to make the transitions we now have to make?*

For the first time in human history we are approaching a future that will be fundamentally different from our present. According to futurist commentators like Daniel Susskind (2020) and Pavel Luksha (Luksha et al 2017) the pathway to the future involves increasingly rapid introductions of new technologies, ever expanding information flows, decreasing shelf-life of knowledge, more automation and less work for most people. People will increasingly need to co-exist with intelligent machines and AI and humans themselves are likely to become part machine and incorporate AI posing profound questions on what it means to be human. What will employability mean when large parts of a population will not have access to employment in the ways which we understand? In the UK we had a foretaste of this scenario with the furlough scheme during covid lockdowns, although at that time people were highly restricted in what they could do. A world with less work speaks to developing resourceful people who can access affordances which give them meaning and purpose, across the whole of their lives, not just work and this is an important challenge for lifelong learning.

Fourthly, science tells us that our resource intensive consumptive and wasteful habits (we are using nature 1.8 times faster than our planet's biocapacity can regenerate), and continuous economic growth, are causing us to exceed 6 of 9 key planetary boundaries (Rockström and Gaffney 2021, Rockstrom and others 2023). Economic/ technological prosperity for some parts of the globe, has been achieved at the cost of destabilising the systems – like our climate and oceans that enable all forms of life to flourish.

We need to change the way we live if we are to have a future and that involves changing the way we think about ourselves in relation to everything else and achieving this difficult transition is a key challenge for lifelong learning and education. *“Since uncertainty means it is impossible to predict the evolutions coming our way, successfully dealing with change and transitions is becoming increasingly important...The purpose of learning in such a context is the ability of each person to deal with transitions proactively and intrinsically motivated.”* (Tindemans and Dekocker 2020 p5). The implication being that education has a fundamental role to play in developing people in ways that enable them to make these unknowable transitions and this will require a concern for the development of the whole person not just their specialist *knowledge, skills* but their character which draws on *psychosocial factors like beliefs, attitudes, values and motivations*.

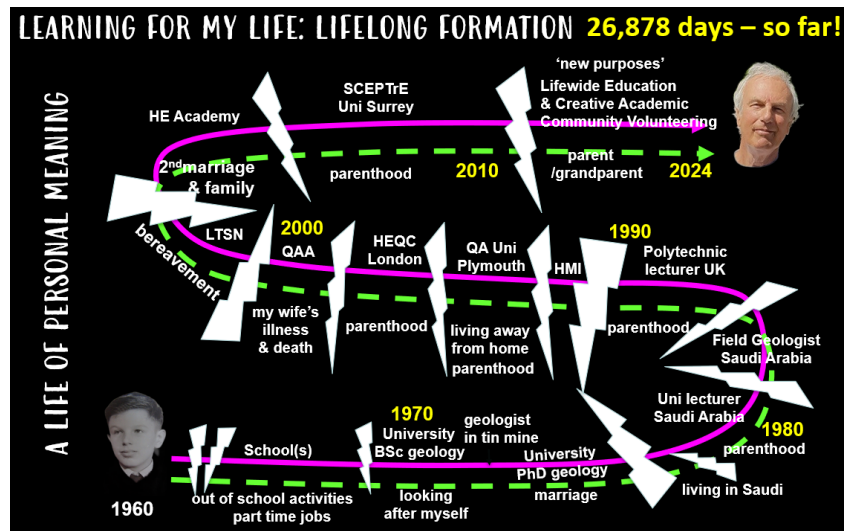
5 Learning for Life – personal perspective on becoming - living, learning and forming in a world in formation

The Danish philosopher Søren Kierkegaard once said *'Life can only be understood backwards; but it must be lived forwards'*. Steve Jobs expressed the same idea in a different way *'you can't connect the dots looking forward; you can only connect them looking backwards. So you have to trust that the dots will somehow connect in your future,'* which is what we do as we try to create a life with meaning.

When we make a map of our life, such as this one I have made here, it connects the dots in a way that has meaning to me. I can see many points and events that changed the course of my life and influenced my formation as a person and I understand why my life unfolded in this way.

As a 10 year old boy I had no idea what I was capable of doing or achieving. I had no idea about how my life would unfold. The idea that learning would be one of the most important activities in my life did not occur to me. The meaning of my life was contained within my day to day doings in a range of settings e.g. my

family, school, church choir, cub scouts and playing sport and games, and socialising with friends and these activities and environments provided the day to day contexts for my learning and development, although I rarely noticed it, and the foundation for my future – whatever that might be. This perspective on learning only changed when I discovered geology as a subject at the age of 17. It became my passion and I wanted to learn more and very soon made my mind up that I wanted to be a geologist. But to live the life of a geologist I had to become one and that required a minimum of 5 years of study from the point I decided. But that gave me purpose and it turned my learning in and for my life into a strategic lifelong learning project and a process of becoming a particular sort of person.



My map reveals patterns of participation and involvement in life – for example of formal education, of movement from one job to another, one role to another, one organisation to another, one career or self-created enterprise to another and perhaps one country/culture to another. Intertwined with this education and work pathway are important life events for example forming a relationship with someone who becomes your partner for life, becoming a parent and raising a family, and losing a spouse and suffering bereavement then some years later finding another partner for life, remarrying and helping to raise another family, and now in my third trimester so to speak learning to be a grand parent alongside the other purposes I try to fulfil. Through our experiences of significant events and changing circumstances we co-create a life of deep significance and meaning: a unique life that has only ever been lived, and only ever will be experienced, by one human being. Looking back my lifelong learning and formation as a unique person are revealed and it now makes sense to me.

By joining the dots we can identify many transition points in our life where we have had to make changes, sometimes profound changes, that have impacted on our formation as a person and changed the course of our life. Each of these transition points has required enormous efforts to learn and to discover and make new meaning in order to make the transition. Some of these transitions have required courage to undertake and been very challenging and stressful with significant emotional and physical cost. Some transitions required me not only to abandon previous investments in learning and practice, but to give up identity in order to pursue a new pathway. Each of these experiences creates disturbances and sometimes disruption in the pattern of our living and each requires us to go through a transition through a liminal space, from the known to the unknown until we eventually reach the known again, in order to live a different life as a different person

Sometimes we are not in control of our own destiny and the changes we have to make in the pattern of our life are foisted on us as we experience traumas such as bereavement, divorce, serious illness, redundancy or other significant setback. This **lifelong** dimension of our formation gives us a sense that life is a journey, more accurately an entanglement of many journeys and many transitions with all the uncertainties they bring. It is not surprising therefore that at the core of our competence as an organism is our ability to learn and the psychological qualities, values and beliefs that motivate us to try to learn and discover meaning in what we do, that helps us maintain a sense of self as a unique human being amongst the turmoil of an ever changing world.

Our life narrative is a heuristic to help us make sense of and value our life as a journey. Our narrative is the means by which we integrate the different dimensions of our lifewide experiences into the journey that is our becoming. Zittouni & Brinkmann (2012) suggest that we engage in meaning making at an existential level as we take in the larger scale of our life and connect the twists and turns. Here, learning is considered as located within a person's life trajectory, and, as it is often triggered by situations of rupture or uncertainty, it might question or reshape his or her whole perspective on her past and future possibilities – that is, a life-meaning (ibid p1810).

Ron Barnett argues that in the supercomplex uncertain world we live the idea of lifelong learning should be *“translated into a journey of lifelong becoming”* (Barnett 2022 p3). Becoming, incorporates learning but is a far richer and more profound idea for the progressive formation of human beings than learning alone. It captures the essence of what human organisms strive for in their own development and achievement through all the temporal, spatial, contextual, circumstantial, relational, physical, intellectual and psychological dimensions of their life and more. The idea of perpetually becoming would fit well my story of lifelong learning within which I can see three different senses of becoming. The first is when I set long term goals e.g. to become a geologist which required sustained learning but also lots of experiences of being a geologist. The second sense of becoming emerges in the transitions we either chose to make or are forced to make – e.g. taking on a new role or being made redundant. The third sense – which is the perpetual element of becoming is when we try to create better versions of ourselves -becoming a better person as we engage with a new challenge in order to grow and develop.

6 Learning for Life - personal perspective on living, learning and creating meaning each day

The problem with emphasising the ‘lifelong’ dimension of our life is we under appreciate the significance of the lifewide dimension that gives our life its meaning and provides us with the the opportunities to use and develop our competence in living and express ourselves in many different ways. By creating a map of the environments or domains we inhabit day to day we can better appreciate our sites for living, learning and developing.

This is a map of the lifewide dimension of my life. Each one of the contexts shown in the map requires certain competency – to apply knowledge, skill, beliefs, values and more to act and achieve appropriately and successfully in the situation. I spend my life being someone in these different environments and incrementally becoming different. What comes out of my participation in these different contexts and situations is me – I am the integration of my living and learning.



We learn, develop (become) as a person in every part of our life and our ontological journey of becoming is made up of our formation through and across the different domains of our life. In the time frame of 24 hours when we are not asleep, we might inhabit spaces relating to work, the classroom or self-study, we

might inhabit a family environment or our own home, we might go shopping or go for a walk, socialise with friends, travel on public transport or by car, play some sport, watch TV or read a book, and do any number of things in different sorts of physical spaces, not to mention the communication spaces we access for entertainment, connectivity and learning through our smart phones, computers or other devices. Each of these activities has its own rhythm; fast and slow time jostle and compete and we have to manage our time and determine priorities as the various responsibilities are heeded. Within this framework of possibilities we engage in and integrate all forms of learning to enable us to live a life of meaning. So the timeframes of lifelong learning and the multiple spaces for living, learning, acting and creating meaning in the lifewide dimension of our lives, intermingle and who we are and who we are becoming are the consequences of this intermingling.

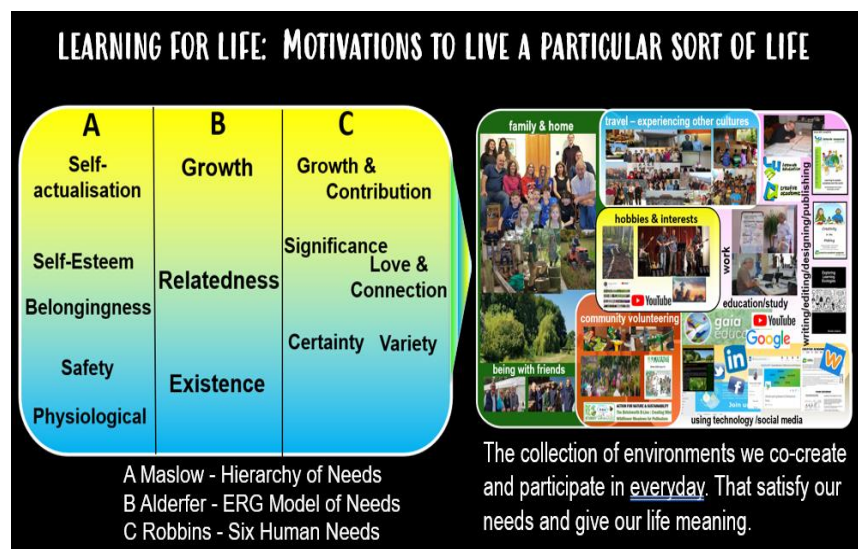
7 Motivational forces that make us want to learn for our life

The forces that drive us to create a life with meaning are embedded in our DNA and woven into us through our lived experiences: they are the heart of what it means to be human and relate to our needs and desires/ambitions. Ideas are rarely new and here I return to adult educator Eduard Lindeman who, writing nearly 100 years ago, offered this insightful perspective on the relationship between learning and our search for meaning.

In what areas do most people appear to find life's meaning? We have only one pragmatic guide: meaning must reside in the things for which people strive, the goals which they set for themselves, their wants, needs, desires and wishes.....they are searchers after the good life. They want to count for something; they want their experiences to be vivid and meaningful ; they want their talents to be utilized; they want to know beauty and joy; and they want all of these realizations of their total personalities to be shared in communities of fellowship. Briefly they want to improve themselves;... But they want also to change the social order so that vital personalities will be creating a new environment in which their aspirations may be properly expressed (Lindeman 1926 p 13-14).

Through our participation in our life we try to satisfy our psychological and physical needs (Maslow 1943, Alderfer 1969). Clayton Alderfer developed Maslow's Hierarchy of Needs into a three factor model of motivation known as the ERG model. In this model the letters E, R, & G each stand for a different human need: existence, relatedness and growth. Alderfer's model says that all humans are motivated by these three needs and they are the most important forces

that drive our participation in every part of our life. Our most fundamental need is to exist – our need for food, shelter, economic independence, health. Beyond this we need relationships that give us purpose, love, friendships, feelings of belonging and a sense of who we are. And then there are needs that relate to our own growth, development and self-expression as a person, providing us with a sense of fulfilment and of achieving our own potential as a unique creative human being deeply connected with our world.



Robbins (2018) highlights an additional need that is not explicitly recognised namely the innate need to give, to contribute to the greater good or causes that are bigger than ourselves and our immediate set of important relationships, which is manifest in the voluntary work that people undertake on behalf of others or other things.

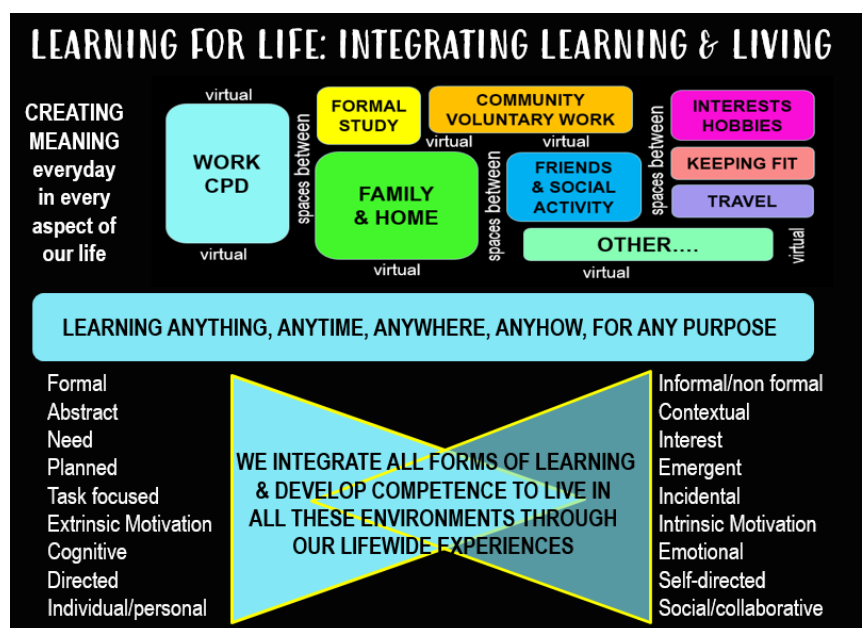
Implicit in all these needs (interests and concerns) is our need to discover meaning in what we do so that all our activities, experiences and their consequences eventually make sense to us in the context of our whole life. I draw again on the wisdom of Eduard Lindeman and use a slightly adapted quote to try to capture the essence of the meaning of life. *Growth is the goal of life. Power, knowledge, freedom, enjoyment, creativity — these and all other immediate ends for which we strive are contributory to the one ultimate goal which is to grow, to become. And the meaning of life is always an emergent concomitant of striving* (Lindeman 1926 p202-03).

While the framework of needs embraces living in the whole of a life, the dominant triadic view of lifelong learning (Aspin et al 2012 and more recently Evans 2022) focuses on employability and the economy, personal development and citizenship for a more inclusive society, addressing a much narrower set of human needs. For this reason, we can argue that a concept of lifelong learning founded on the idea of integrating learning for life, in all the dimensions and implications of what this means, is superior in terms of the human needs it embraces.

8 Learning for Life - inclusive nature of living, learning and forming

The concept of lifewide learning is the most comprehensive and inclusive framework within which we can understand what it means to live a rich and meaningful life and to learn and develop through all the affordances that our life provides.

The lifewide dimension contains the affordance and means to learn anything, anytime, anywhere for any purpose. It embraces all our actions in all our contexts that generate all our experiences within which our learning emerges planned or unplanned, directed or self-managed, internally or externally motivated.



We embody our own learning, every time we participate in a situation it is integrated in what we do, how and why we do it and ultimately what we achieve. But we integrate more than learning. Through our participation in the different parts of our life we develop our personality, our interests and orientations, our ability to express ourselves and communicate in different ways, our imagination and creativity, and our psychological core that is so important in sustaining our selves when encountering difficulties.

I will argue that when we engage with complex situations and practices, we weave together in unique and unpredictable ways aspects of ourselves and aspects of our environment, in order to achieve something we value (p13).

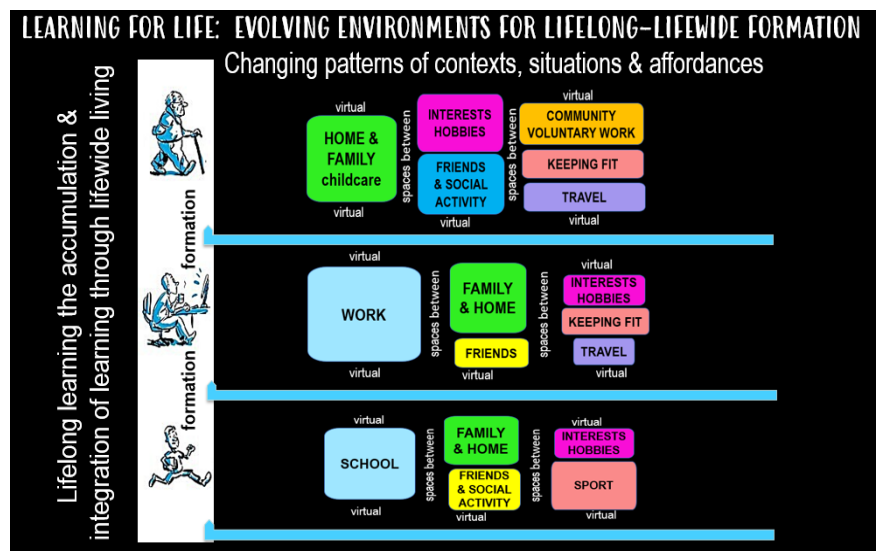
It is because of all these reasons that the idea of lifewide learning is the most useful and powerful concept for education (Jackson 2011, Barnett 2011). The lifewide dimension contains all the circumstances of our current life that determine who we are, but because we can change or add to these circumstances, this dimension of our life offers affordances that enable us to become better or completely different versions of ourselves.

9 Learning for Life – integrating living and learning through the concept of lifelong-lifewide learning

When we say that *lifelong learning is rooted in the integration of learning and living* (Carlsen 2014) we are recognising our participation in the collection of environments that we inhabit. Integration happens on a daily basis, by that I mean that when we come to new situations we bring our whole selves – what we know and can do and what we are prepared to do – our learning is integrated into our thinking and our actions.

The term *lifewide learning* aims to highlight the significance of our everyday environments. It adds important detail to the lifelong learning pattern of human development by recognising that most people, no matter what their age or circumstances, simultaneously inhabit a number of different spaces - like work or education, being a member of a family, being involved in clubs or societies, travelling and taking holidays and looking after their own wellbeing mentally, physically and spiritually. So the significant timeframes of lifelong learning and the multiple shorter timeframes of living and learning in different contexts of lifewide learning intermingle, and who we are and who we are becoming are the consequences of this intermingling.

The figure on the right shows typical sites for learning and formation that a person will experience as they journey through life. The pattern of sites will vary depending on age, circumstances, culture, health, wealth, interests and opportunities. As the journey unfolds, some environments will diminish in significance while others will grow, and the environments themselves change as circumstances change – new people, new relationships, new jobs and many other changes that happen. Fundamental change – such as relocating to another town or country will require a significant rest of environments. Significant change in any or several environments requires a transition across the liminal space from the unknown to known.



Each environment provides a different context, situations and affordances – including opportunities, problems and challenges. We engage in different activities for different purposes, have different relationships and interact with different people to achieve different things. Our competence to perform in an appropriate and effective way has been learnt through previous experiences and new and unexpected situations arise that we might not be prepared for. While mostly we are able to cope there will be times we

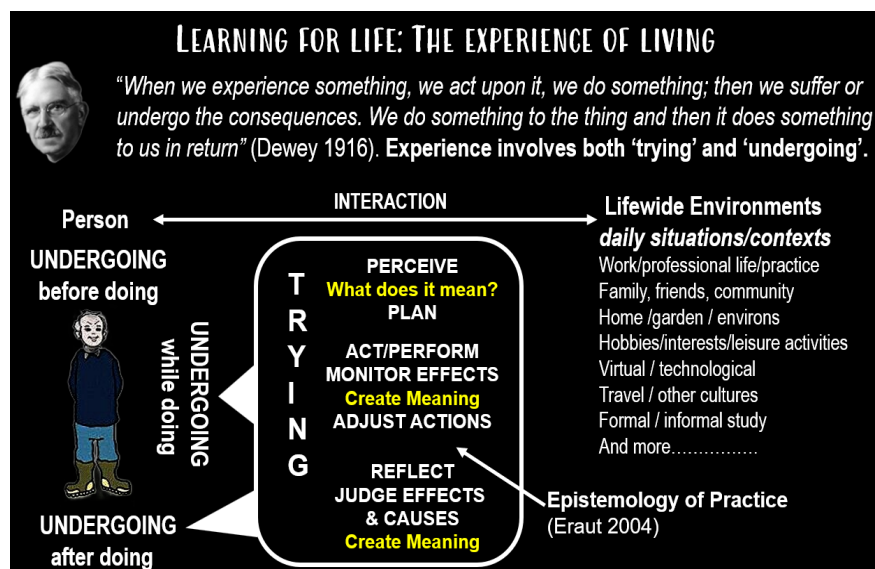
are unsuccessful and occasionally we may fail badly or suffer a setback. We may also introduce an entirely new enterprise or regular activity into our life, or perhaps change something in our circumstances – for example like moving home. In this way we learn how to leave things we have cherished to make transitions to new environments, relationships and more. This is the nature of trying to do and learn in the world that has meaning for us.

We should also recognise the spaces between our regular domains of action. These are often the spaces we travel through on our way to something more significant, for example, going for a walk or run in the environment around our home, travelling to the DIY store in order to buy materials to fix or make something. But while we are in these spaces we are still living and thinking. We might be thinking about a problem or listening to the radio and hearing something that causes us to think.

Perhaps the point to make is that learning for life in the present, in all its forms and manifestations, is the way we satisfy our needs and realise our potential, while laying the foundations for the things we will need to do in order to live in the future. If we want to change our behaviours and habits, develop new competences and develop a skill or talent, we have to put effort into the existing situations we inhabit or add new dimensions to our life. If we want to gain fitness, loose weight or live a life that is more likely to contribute to a more sustainable future we must act now in the lifewide dimension of our life.

10 Learning for Life: the ecological experience of living and learning

The way I have represented lifewide learning draws attention to the everyday environments in which we are living and learning – the collection of domains in our life in which we regularly participate. Anthropologist Tim Ingold tells us that we should not think of ourselves as being separate from our environment, rather we should see ourselves as indivisible from the environment of which we are a part (Ingold 2000, 2011). This is an important starting point for us to consider how we participate in and experience the world that has meaning to us and it leads us towards an ecological appreciation of living and learning.



The foundations for an ecological concept of participation, learning and practice were laid down over a century ago in John Dewey's philosophical examination of the nature of experience. Dewey understood that experience was brought about through our intimate relationship with our environment. The diagram summarises his interactional model of experience and the changes (which he calls undergoing) that result in the

person through their interactions (Dewey 1916, 1934). He explains that experience is always a dynamic two-way process, "An experience is always what it is because of a transaction taking place between the individual and, what at the time, constitutes the environment" (1934 p.43). "When we experience something we act upon it, we do something; then we suffer or undergo the consequences. We do something to the thing and then it does something to us in return" (1916 p.104). Dewey argues that experience involves both 'trying' and 'undergoing'. 'Trying' refers to the outward expression of intention or action. It is the purposeful engagement of the individual with their environment or in Dewey's words, "doing becomes

trying; an experiment with the world to find out what it is like". Through action an attempt is made to have an impact on the world. 'Undergoing', the other aspect of the 'transaction', refers to the consequences of experience on the individual. In turn, in attempting to have an impact, the experience also impacts on us.

The way I have represented the process of undergoing before, during and after in the figure above

Dewey's transactional view of experience involves people situated in an environment trying to accomplish something using resources that are accessible to them and modifying their environment and themselves in the process. We can add further detail to this model of interaction using Michael Eraut's (2004) *epistemology of practice* heuristic which he developed by observing practitioners working and learning in the workplace. Much of our living involves contexts and situations with which we are familiar and we do not need to think too hard about how to respond. But when we encounter a new situation we perceive it and create meaning – assess what we have to do and plan how we are going to act sometimes in real time at other times more deliberately. We then act on our plan paying attention to the effects we are having and adjusting our actions where necessary. We may then reflect on and analyse the whole experience and try to judge our effectiveness in terms of what we were trying to achieve. This reflective process enables us to create deeper meanings and understandings about our whole experience.

11 How might this model of human-environment participation & interaction be applied to practice?

Here we have the wonderful sight of a teacher in her classroom with her children immersed in an activity for the purpose of learning. This is an important part of her life where she has developed the competence to live in a way that is effective in this environment. She, and her pupils, are living and experiencing the moral purpose of education – to enable people to develop and achieve their potential, and there is joy on the faces of all participants – they are fully engaged and alive. The teacher is *'participating in immediate, concrete, specific, meaning-rich situations.. endowed with cultural meanings; acting and being acted on directly or with the mediation of physical-cultural tools and cultural-material systems of words, signs, and other symbolic values'* (Lemke 1997 p37).

Through years of training and practical experience the teacher has undergone in order to be in this situation. Furthermore, she will have undergone specifically for this classroom session as she thought about and planned her lesson (forethought) and decided what activities, materials and tools she will use in order for the children to learn what she intends them to learn.



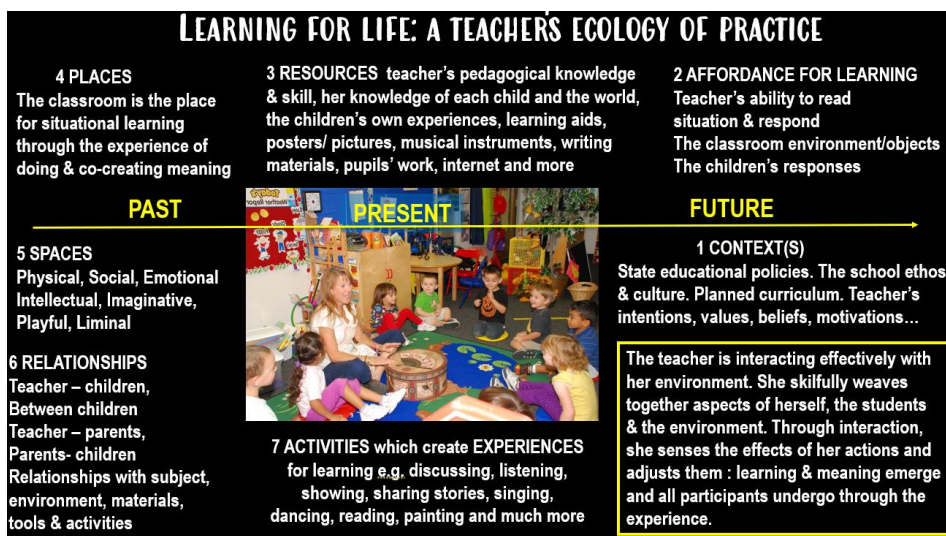
From her learned repertoire of skilful actions she selects those that are most likely to engage her students in this context. She begins the lesson continuously perceiving the environment and monitoring the effects of her actions and where necessary adjusting them. As the lesson unfolds she responds in real time to whatever emerges. Learning and other achievements emerge through the interactive process for both the teacher and the learners (all participants undergo).

After the class has finished the teacher will use memories of her experience to reflect critically on her actions and their effects and learn from her reconstructed experience and may perhaps imagine new possibilities. Through the totality of these experiences she continues to learn and undergo. She has expressed her competence through her performance and she may have developed some aspect of her competence as she learned through the experience.

12 An ecology of practice for living, learning, making meaning & forming in a teacher's environment

By studying the nature of the relationships and interactions in the teaching situation we can create a map of the dynamic world the teacher is creating, inhabiting and changing and being changed by. I am calling this presence, relationships, interactions, interdependencies and effects - an ecology of practice (Jackson 2016, 2019, 2020a) and it represents the human-environment dynamic within which people achieve the things they value and learn (undergo or form) through the process.

Her ecology of practice has a past – her own life experiences and particularly those experiences that have enabled her to undergo and become a teacher. The knowledge and skills she brings to the situation is the result of her past undergoing. Her ecology of practice has a present as it unfolds in her classroom as she causes or interacts with each new situation. In her near future she is likely to reflect on her experiences and learn from them. And in her more distant future she will draw on the experience and what she learns as she plans new actions.



The teacher's thinking and actions are shaped by many things. Her motivations for doing a good job, the beliefs she has about the most useful ways of achieving her goals, and her need for personal growth by perhaps trying something new. She is embedded in a number of contexts - for example the ethos and culture of the school, the various policies that

affect what and how she teaches and the particular educational context of what she is trying to achieve. She takes in the information flows resulting from activity through all her senses, she perceives new

affordances – opportunities for action in real time as the children participate in the activities she has created. There are abundant resources in this environment to stimulate and support learning but the most important resource is the teacher and the children. The classroom is a special place for learning in a school that is also a special place for learning. The children expect to learn when they come to this place. They cohabit the same temporal and physical space but through her skilful practice the teacher also creates cognitive, psychological, emotional and playful spaces for interaction and learning.

Everyone and everything in this environment is related and these relationships are used and developed through the particular activities that are orchestrated and facilitated by the teacher. Activities that are intended to cause interactions with potential for learning and development.

The components of this ecology of practice in which the intentional outcomes are developmental, are woven together by the teacher in a part deliberate, part opportunistic act. The teacher is creator but she only comes to understand the effects of her ecology as it unfolds and so she monitors the effects and adjusts her actions where it is appropriate. Through her actions, the tools she uses and the feedback she gains through her senses, the teacher extends her mind and body into his environment so that she becomes indivisible with it and the ecology she is creating. Within the ecology meanings are shared and co-created and the totality of the experiences enable both the teacher and the children to UNDERGO – through this ecological process they are becoming incrementally different people.

Reflecting on White's (1959) ecological definition of competence '*....an organism's capacity to interact effectively with its environment*' - the ecology of practice of the teacher is a form of ecological competence necessary to perform effectively in the situations she is creating in an environment that she understands.

Through living the life of a teacher in this particular environment in this particular way the teacher is doing more than integrating her learning and living, she is integrating herself and those aspects of the environment that she weaves into her ecology of practice within which new learning and other achievements emerge.

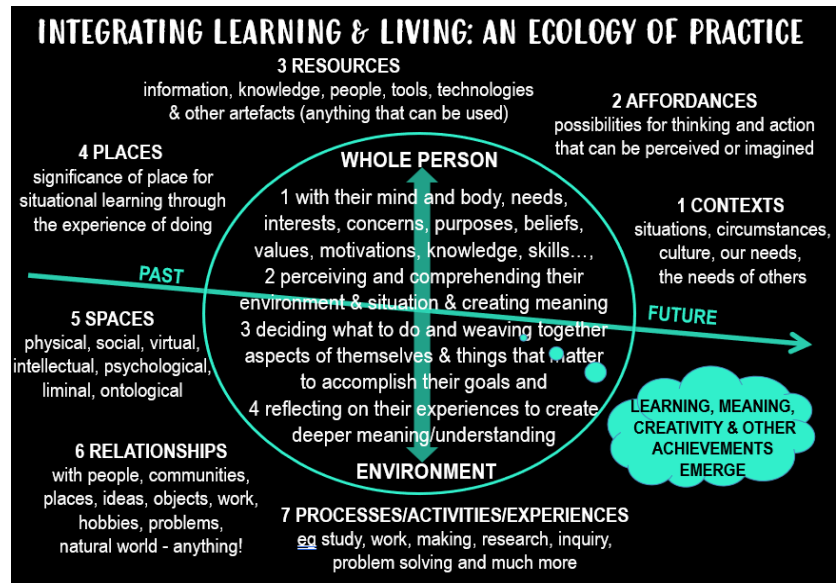
13 Learning for Life: an ecology of practice heuristic within which learning is integrated

From this simple example of a school teacher fulfilling her role in a competent and creative way, demonstrating *her capacity to interact effectively with her environment and the situations she is co-creating to achieve her goals*, we can devise a heuristic that we can use to examine and interpret any complex practice within which learning and other achievements and outcomes are integrated (Jackson 2016, 2020a).

The creator of an ecology of practice draws on aspects of themselves that they have developed prior to the particular situation they are inhabiting. They perceive the situation, interpret meanings and decide how they will act or respond and select aspects of themselves which they weave into and with selected aspects of their environment to achieve their goals.

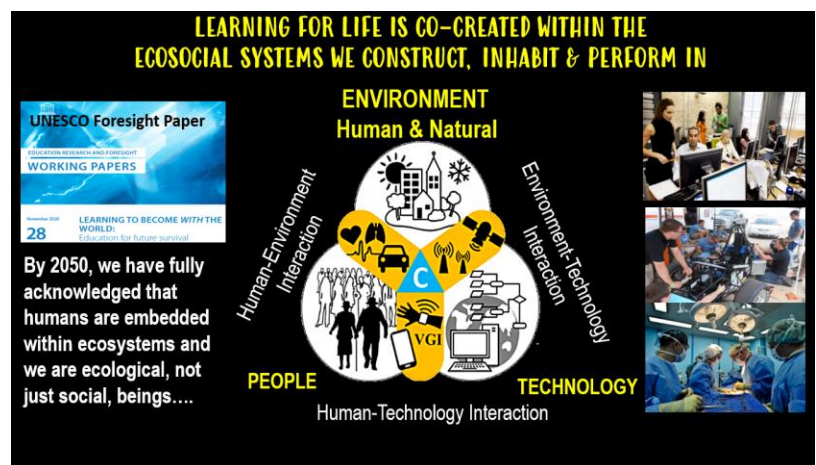
Their ecology of practice enables the creator(s) to extend their mind and body into their

environment, a process that is assisted by the tools and techniques they use. It is the means by which they become indivisible with their environment or as Tim Ingold so eloquently put it, “ ‘organism plus environment’ should denote not a compound of two things, but one indivisible totality”, “this totality is not a bounded entity but a process in real time: a process, that is, of growth or development” (Ingold 2011). An ecology of practice is the means by which a practitioner combines themselves in ways that enable them to interact effectively with their environment in order to have the effects and achieve the results they intend, mindful that there will always be effects that they had not anticipated and being ready to respond to whatever emerges.



14 Learning for Life is co-created within ecosystems/ecosocial systems

The natural world organises itself into ecosystems – communities of interacting organisms interacting with non-living things in a particular space and time. In a healthy ecosystem these relationships and interactions help create the conditions for life to flourish. We are also embedded in natural ecosystems but we also modify those systems with our individual and social behaviours, consumption needs and productivity. But a human ecosocial system serves many more purposes than living – it constitutes a specialised environment for – acting, performing,



producing, making, creating, learning, achieving particular things. Some examples of work ecosocial systems are illustrated.

A world in formation in which everything is continually reforming – people, social structures and infrastructures, places, institutions and organisations, contexts, ideas, technologies and more lends itself to the idea of ecosystems as a description of the dynamic environment in which people, technology and the material and non-material environment interact.

The idea of ecosocial systems forces us to think of the whole system in which people live and work, form relationships and interact in order to achieve the things they value and access the flows of information and resources that are essential to learning and achieving.

15. Learning for life within and outwith a University Ecosocial System

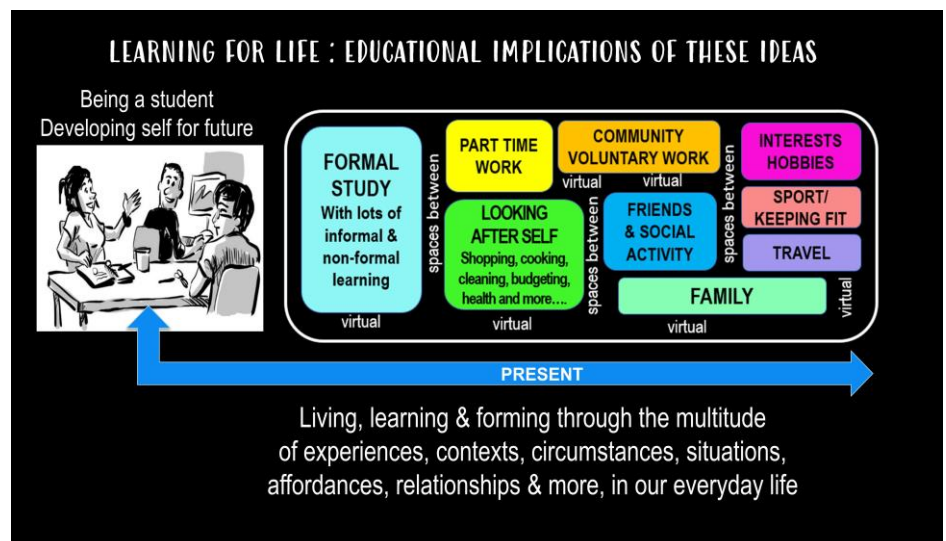
Higher Education is a specialised ecosocial system and a key social infrastructure. As in all ecosystems there is a nested structure and interactions and information flows between the different levels of the systems. At the chalk face so to speak are the ecologies of practice that practitioners create in order to enable learners



to learn. These are enacted within particular disciplinary and curricular contexts which are embedded in departmental ecosystems which in turn are embedded within institutional/ organisational ecosystems with rules, culture and information flows that regulate what happens at deeper levels. The system is open to the societal and global HE system within which many different sorts of agents and agencies are embedded, including organisations and communities that are grappling with problems that Universities can assist with.

16 Learning for Life – educational implications of a lifewide-ecological perspective on the formation and achievement of people

The first implication is that we have to recognise that formal study is only one part of a rich life of learning and forming and that students are on multiple journeys of becoming as they participate in the various contexts and situations that make up their life. We need the learning and UNDERGOING through all these environments in

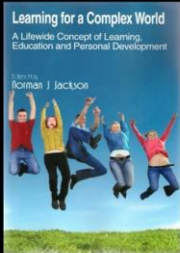


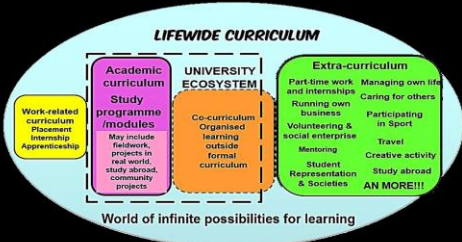
order to learn for our life and by explicitly recognising this we can build a stronger foundation for their lifelong learning.

17 Life as a personal curriculum

LIFE IS THE CURRICULUM

PROPOSITION 1 :
The whole of a person's life is a resource for their learning & developing competence for their life now and in their future






World of infinite possibilities for learning

Living as Curriculum : Narratives of being and becoming

CATCHING STORIES
Shoe box
Blog
Scrapbook
E-portfolio
Video diary
Digital story
Movie



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

More than a decade ago at the University of Surrey we developed the idea of a lifewide curriculum and piloted an award scheme that sought to recognise learning and development through the whole of a learners life.

The results of this educational development work are published in an open access book.

Learning for a Complex World: A Lifewide Concept of Learning, Development and Education
 Edited by Norman Jackson
<https://www.lifewideeducation.uk/learning-for-a-complex-world.html>

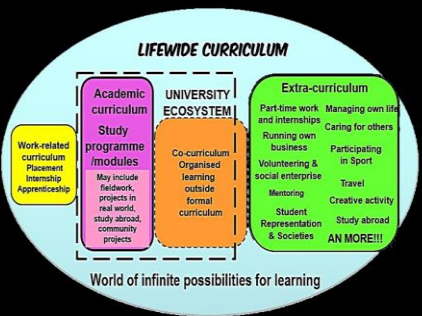
Through the award scheme learners claimed forms of learning and development they had gained through their lives and provided evidence in the form of narratives and artefacts: the most powerful of which were narrated scrap books brought to life as students presented their stories. Such a process greatly enhances self-awareness of how, when, why and what learners are learning in the multitude of environments and contexts that constitute their life.

18 Learning for Life is ecological in nature

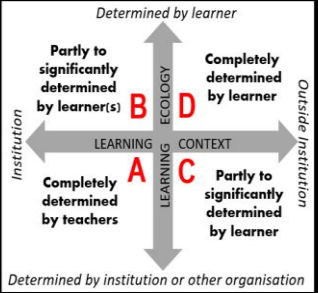
As discussed previously achieving anything that is complex or challenging in life requires the creation of an ecology of practice within which learning is embedded. It is the means by which a person extends their mind and body into the environment to understand the problem and access the information flow that are essential for working with a problem or challenge. It is through this process of relating to and interacting with the world that we learn and undergo (transform

LEARNING FOR LIFE: DEVELOPING ECOLOGICAL AWARENESS & COMPETENCE

PROPOSITION 2 :
A key pedagogical task is to enable learners to create or co-create their own ecologies of practice within which learning is embedded to achieve their own goals and purposes



World of infinite possibilities for learning



Determined by learner

Partly significantly determined by learner(s) **B** Completely determined by learner **D**

Partly significantly determined by learner **C** Completely determined by teachers **A**

Determined by institution or other organisation

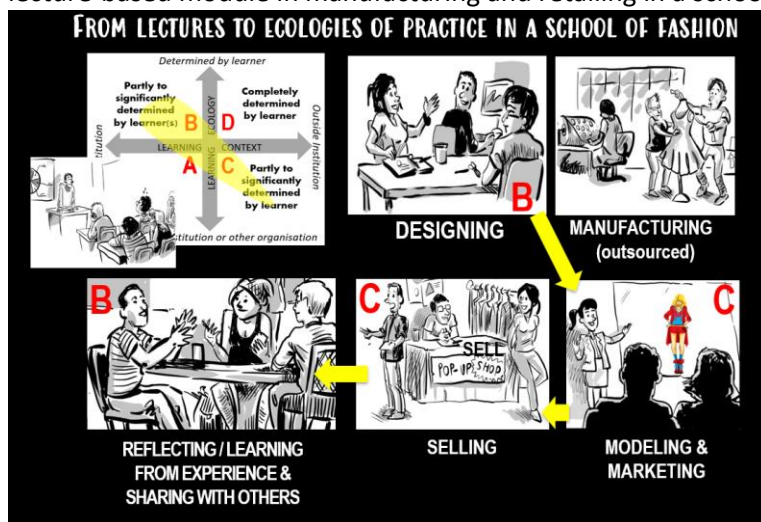
understandings) and bring about change in our world.

Regardless of the domain the most important pedagogical task for teachers involved in preparing learners for problem solving and opportunity taking in life is to enable learners to develop themselves so that they can create their own ecologies for practice which incorporate their learning.

This simple tool enables us to see where, in the totality of a students' experiences. they are able to create and implement their own ecologies. It shows 4 domains in which learners have little or no control, partial to significant control and complete control over their ecologies for learning.

19 Learning for Life – example of adapting a lecture-based course to enable learners to create their own ecologies for practice

It's possible to create experiences through which learners can create, to a greater extent, their own ecologies through a signature learning experiences. Here is an example of how two lecturers turned a lecture-based module in manufacturing and retailing in a school of fashion, in which they controlled most aspects the ecology for learning, into an authentic process for experiential learning in which learners themselves were able to create their own ecologies of practice within which their learning was embedded.



of fashion, in which they controlled most aspects the ecology for learning, into an authentic process for experiential learning in which learners themselves were able to create their own ecologies of practice within which their learning was embedded.

Aided by a small grant from the university, the brief was to invent and design a range of collegiate garments. The designs had to be industry standards in order for a manufacturer to produce them. Students worked alongside the teacher who had manufacturing experience. Once made the students

created a marketing campaign and pop-up shops in and around the university and sold the garments making a small profit, the funds were then reinvested for the next educational cycle. The process gave students the chance to invent their own collaborative ecology for learning and practice and teachers 'worked alongside' them.

20 The UNESCO vision for a sustainable future in which we “learn for oneself, for others and for the planet” (UNESCO 2020 p. 14) highlights the essential role of individuals’ lifelong learning to achieving a future that is sustainable and regenerative. For Barnett (2022), if learning has a purpose it is to learn how to live on this tiny planet. I would add ‘much better than we are currently doing’.

Individually and collectively we need to learn how to CONTRIBUTE in ways that minimise damage and optimise affordance for a sustainable regenerative future (Reed 2007, p. 674). But to achieve this cultural shift, educational



thought leaders, policy makers, and practitioners must embrace a similar ecological world view as our ancient ancestor, within which learning, along with all other human activities and phenomena, can be understood as ecological phenomena

The ecology of practice heuristic (slide 13) reveals that we are fundamentally interbeings – thinking and acting in an ecological – relational and interdependent manner with the world around us. Such interactions and relationships connect us physically, cognitively, emotionally, and spiritually to the living and nonliving things in the environments that have meaning for us and enable our imagination and creativity to perceive new affordances and generate new possibilities and meaning.

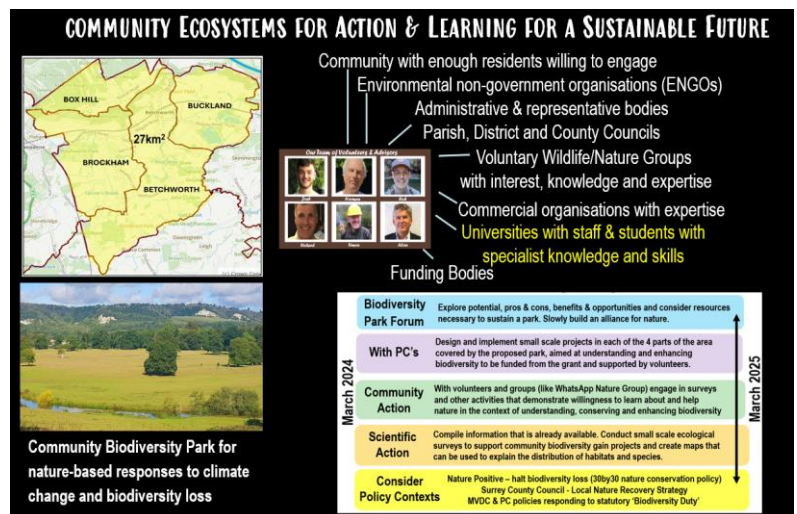
21 Learning for Life – Living for a future that is more sustainable than the one we are currently heading for: Collaborating with community based ecosystems.



We develop competence for living in ways that will create a different future through the whole of our life. This is an important reason for why we should expand our understanding of curriculum to embrace the whole of a student's life. Furthermore we should design curricular to create opportunities for learners to participate in real world projects that are trying to bring about changes that are consistent with a more sustainable future. I

know that many universities encourage this but I think we have to be explicit and systematic in our design intentions and expectations.

I offer an illustration of what I mean. It's a project I'm leading and we have just begun whose aim is to create what we are calling a Biodiversity Park' to help to address the significant problem we have in the UK and globally of the loss of habitats, plants and animals.



The basic idea is that a small team of volunteers embedded in their communities in 4 parishes covering an area of 27km will facilitate a discussion involving many people, interest groups and decision makers, aimed at exploring the idea of a Biodiversity Park, the pros and cons, benefits, opportunities and challenges in the hope that by the end of the process the understanding that has been co-created will engender commitment to bringing the idea to fruition. Within this process of bringing people together there are opportunities to work with university staff and students with specialist knowledge and skills.

Our local university has a project in which they are using remote sensing mapping and AI based machine learning to create detailed habitat maps but they need citizens to undertake ground truth surveys to test and develop their models. This is something we hope to collaborate on.



22 Learning for life – means embracing the whole life of a person and supporting their formation through and throughout their life

UNESCO’s transdisciplinary expert consultation report – *Embracing a Culture of Lifelong Learning*, quite rightly identified the need to build, through many different means, a culture that and valued and encouraged participation in learning. A culture, “that shapes how learning and knowledge production are understood and take place” (UNESCO 2020a p12). This report suggested that ‘A more holistic understanding of the concept of lifelong learning is needed – one which puts the innate capability to learn at the core and recognizes any learning activity throughout life as important’ (UNESCO 2020 p. 19).

This narrative argues that Arne Carleson’s (2014) representation of lifelong learning as the integration of learning and living provides a foundation on which to build

a culture that understands and values the possibilities for learning and personal or professional development in every aspect of life. It neatly embraces the idea that learning for, and learning through life, are intimately interwoven and I have argued that it makes no sense to see learning for, and learning through our life, as separate things. We integrate all our learning through living and we use whatever we can when confronted with new situations, problems and opportunities as our life unfolds. Once we have experienced something we undergo which is a process of assimilating our learning and this is available for future action.

Education generally positions itself on the *learning for* side of this integrated whole so the challenge for educators is to think more holistically in their designs. I offer two ideas to facilitate this process: the explicit recognition and elaboration of the lifewide dimension of living, experience and learning and the ecological nature of experience and learning. Both ideas have potential to contribute to a more holistic understanding

THE EDUCATIONAL CHALLENGE OF LEARNING FOR & THROUGH OUR LIFE

- 1 **We should not see learning for, and learning through, our life as separate things.**
We integrate all our learning and make no distinction when confronted with a new situation, problem or opportunity.
- 2 **Learning for, and through, our life is lifelong & lifewide:** A continual process of becoming and undergoing as we interact with a multitude of environments, contexts and situations that make up our life day by day.
- 3 **Learning for, and through, our life is ecological:** In any complex or significant situation requiring learning, we weave aspects of ourselves, others and our environment together in unique solutions to try to solve problems and benefit from opportunities.
- 4 **Learning for, and through, our life needs to consider learning for life in the future:** The future is already here as communities try to transition in all sorts of ways to a future that is more sustainable than the future we are currently creating.

Slides & Sources of Ideas
<http://www.normanjackson.co.uk/delft.html>

THANK YOU

of lifelong learning, and seek to explain how ‘learning and knowledge production,’ along with other aspects of the formation of a person, ‘take place’, in the everyday environments of a person.

We have reached a point in human history where the moral purpose of education and individuals’ commitment to learning throughout their life, need to be broadened to encompass the health and vitality of the planet and the life it supports. As humanity is the living conscious expression of a world in continuous formation, we have a moral responsibility to embrace what Thomas Berry (1988) calls the new Ecological Age founded on ecological principles, and actively participate in the next “Great Work” for humanity (Berry 1999), namely, the construction of an Ecological Civilization (Lent 2021a & b Korten 2021). It seems reasonable to suggest that understanding learning and practice as ecological phenomena might constitute an important stepping stone to this optimistically imagined future. Embracing the idea of learning through life as well as learning for life might encourage new designs that treat life and living as a curriculum and encourage learners to participate in collaborative, solution finding actions to help communities and societies transition to a future that is more sustainable than the one we are currently creating.

These websites host free resources that relate to the ideas and practices I have been talking about.

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

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

<https://www.learningecologies.uk/>

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

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Norman Jackson is an Emeritus Professor of the University of Surrey, England, and Founder of 'Lifewide Education' and 'Creative Academic'. His work as an educator has formed around the holistic and creative development of people through all the experiences their life affords.

At the Quality Assurance Agency he led the development of a framework for personal development planning (PDP) that was introduced across UK HE in 2000. At the Higher Education Academy he led work on creativity in higher education which laid the foundation for Creative Academic. As Director of SCEPTRe at the University of Surrey, he developed and applied the idea of lifewide learning and education to give meaning and substance to the concept of lifelong learning. The idea of ecologies for learning and practice emerged from this work. His current work with Lifewide Education is exploring through collaborative, action-based inquiries, how our lifewide living and learning might be used to support more sustainable regenerative futures.

These websites contain free resources relating to these ideas.

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

<https://www.learningecologies.uk/>

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

POWERPOINT PRESENTATION CAN BE FOUND AT <http://www.normanjackson.co.uk/delft.html>

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