

Lifelong-Lifewide Learning :

Integrating Learning and Living for a More Sustainable Future

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1 Preamble

It's a pleasure and an honour to be given this opportunity to contribute to this very special conference. It's special because of the scale and diversity of people, topics and perspectives that are being brought to bear on what we call lifelong learning: one of the fundamental characteristics we have as a species that enables us to survive, adapt and flourish in an ever changing and increasingly connected but disrupted world.

We have chosen to be here because we have a particular interest in lifelong learning. In this moment and over the next two days we are inhabiting an environment with enormous affordance for learning. As we encounter new perspectives, ideas, practices we will try to make sense of them and connect and integrate them with our understandings that have developed over a lifetime of experiences to create new meaning. Through the connections and new relationships we make while we are here we create new opportunities and new needs for learning into the future. Our shared situation illustrates very well the entanglement of time frames - past, present and future, with situations, actions, environments and transformations in the present, within the concept we call lifelong learning. It is this entanglement and associated emergence of learning and formation in the present, connected to and grown from our past with potential for the future, that I want to explore.

My educational interest, for many years, has been in the holistic and creative development of people through all the experiences their life affords. Most of my career has been in higher education but many of my ideas are derived from adult education and my work continues to be inspired by adult educator Eduard Lindeman's wonderful vision that *'the whole of life is learning therefore education has no ending'*.

I'm going to engage with the idea of lifelong learning 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 of our need, as a species, to lay the foundations for a more sustainable future.

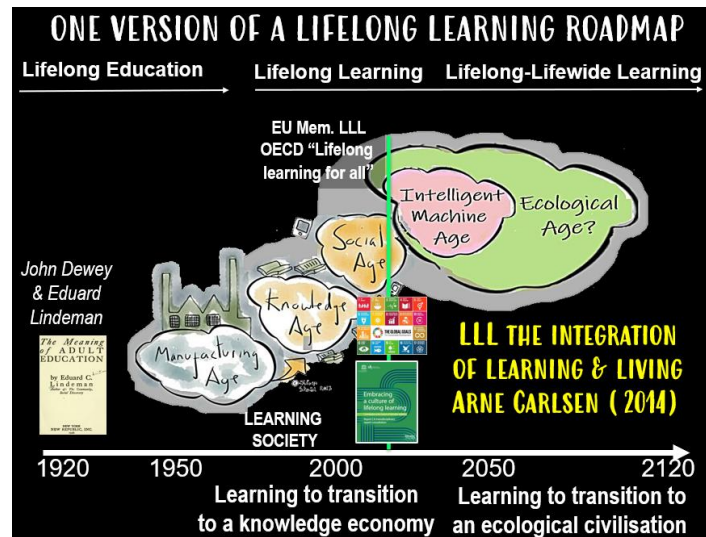
2 One version of a lifelong learning roadmap

It always helps to know where we have come from and where we might be going. Here is one version of a lifelong learning roadmap.

The first thing we might say is that we have over 100 years of theory, policy, practice and research relating to learning, and education but we still have much to learn. Some of the most useful and profound thinking about lifelong learning was developed and applied in the 1920s by theorist John Dewey and visionary adult educators Eduard Lindeman (USA) and Basil Yeaxlee (UK) who explained that, *'education is life and the whole of life is learning.'* They visualised self-education and learning through everyday living as one and the same. These ideas are as relevant today as they were a century ago and they underpin this narrative.

The second thing this version of a roadmap reveals is the 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. 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 next transition(s)?



Thirdly, the last few years of turbulence have shown us that we live in a world in rapid formation and it's gathering pace because of human activities. 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 key planetary boundaries (Rockström and Gaffney 2021). 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).

We can look at our current situation in despair – why have we brought ourselves to the edge of destruction? Or, we can look at our situation with optimism – the transition we have to make is a necessary part of our evolution as an intelligent species. A significant part of the wicked problem of our future survival is framed by the United Nations 2030 Agenda for Sustainable Development (UN General Assembly Resolution 70/1), which offers 17 Sustainable Development Goals (SDGs).

Education has its own goal – SDG#4 “Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all” (UNESCO 2015). SDG#4 gives education a new role – to encourage behaviors that will support sustainable development. An important part of this new role is to educate the world into new ways of understanding, which actively embrace learning as the core regenerative process of mankind. Learning and creating meanings grown from the whole of our existence as a species, from and through our interactions with our world, is perhaps the fundamental difference between ourselves and the intelligent machines that are increasingly displacing human activity – especially work.

Prompted by the SDGs, education systems all over the world are beginning a journey to support the societal and cultural transformations necessary to achieve a more sustainable world (UNESCO 2020a), but can this happen without fundamental changes in the way we educate people and develop their understandings of what learning means and what it is for? Barnett (2022) argues that if learning is to have a purpose then surely it must be to learn how to live on this tiny planet

UNESCOs most recent proposals call for a new culture of lifelong learning (UNESCO 2020a) and for renewing education the recognition that “Curricula must embrace an ecological understanding of humanity that rebalances the way we relate to Earth as a living planet and our singular home” (UNESCO Futures of Education Commission 2021, p. 4). But the report fails to recognize that learning and living themselves are ecological phenomenon that connects us to our living planet and its continuous formation every day (Barnett and Jackson 2020, Jackson 2022), and this is what I want to address.

3 The role of learning in our competence to live different sorts of lives

It is clear that we will not have a future if we do not learn to live in a more harmonious and sustainable way with our planet. If *‘the primary purpose of learning is to learn how to live on this tiny planet’* (Barnett 2022), policies and practices that are overwhelmingly geared to encouraging learning for employability and economy, are not enough.

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 through 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.

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

INTEGRATING LEARNING & LIVING: COMPETENCE FOR LIVING A CERTAIN SORT OF LIFE

Learning is an essential element of **competence to live** ‘an organism’s **capacity to interact effectively with its environment**’ (Robert White 1959)

‘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’ (Vitello et al 2021)

But we need to add - and having the will, confidence, self-regulatory habits and resilience **to learn and develop**

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, Grotzer & 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.” This 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, and better performance for the future as we reflect on and learn from the whole experience. 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.

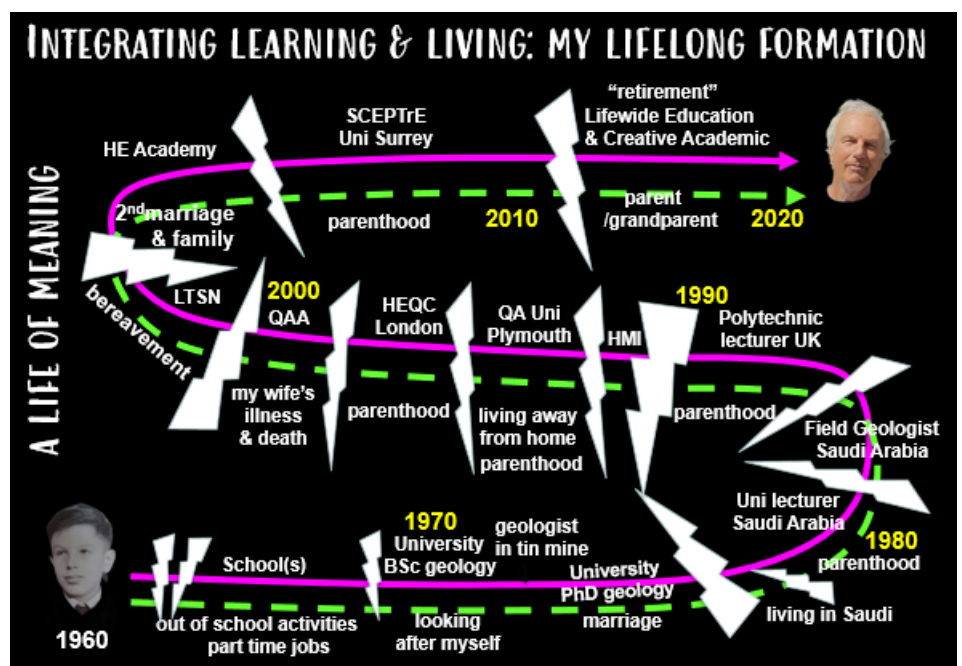
This addition recognises that competence involves a commitment to learn and develop through our experiences of trying to perform and achieve so that our evolving competence becomes integral to our ongoing formation as a human being. It also means that having this form of general competence in which a 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 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 the moment into a strategic (lifelong) project of becoming.

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 in life, becoming a parent and raising a family, and losing a spouse and suffering bereavement then some years later remarrying and helping to raise another family. Through our experiences of such 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.

5 Personal lifewide perspective on living, learning, creating meaning & forming

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.

6 Motivational forces that drive us to create a life with meaning

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 the lifewide dimension of 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 contribute]. And the meaning of life is always an emergent concomitant of striving (Lindeman 1926 p202-03).*



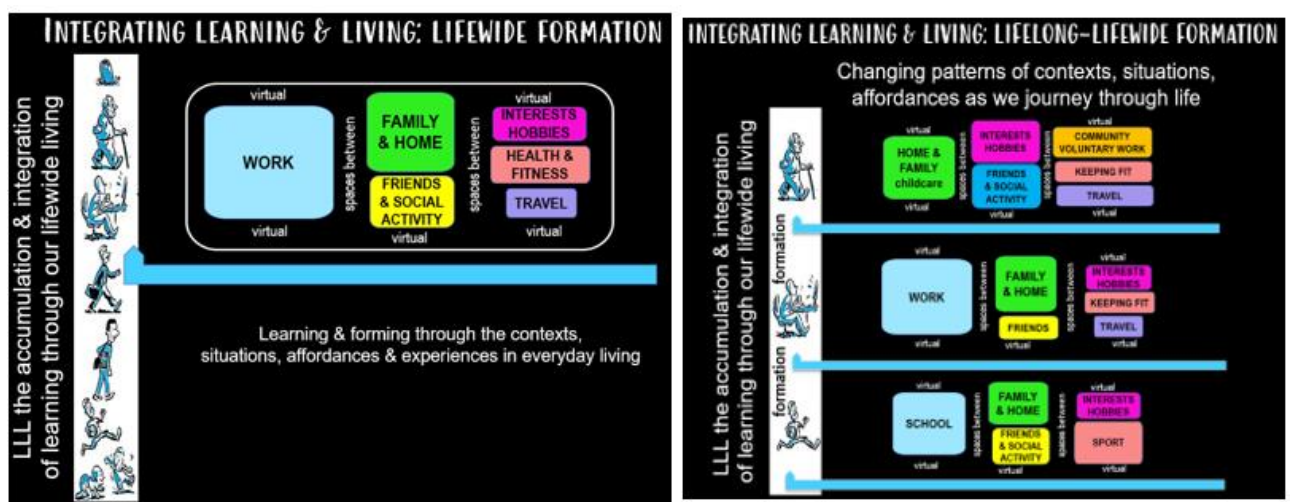
While the framework of needs embraces living in the whole of a life, the dominant triadic view of lifelong learning (Aspin et al 2012 and more recently Evans 2022) focuses on employability and the economy, personal development and citizenship for a more inclusive society, addressing a much narrower set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

7 Making practical use of the idea of lifewide learning in a concept of lifelong 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. Intregation happens on a daily basis, by that I mean that when 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 below (left) shows a typical selection of sites that an adult in the UK might experience over the time scales of a few days or week. The pattern of sites will vary depending on age, circumstances, culture, health, wealth, interests and opportunities. It will change as an individual journeys through life (below right). Some enviroments 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 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 living and learning in the present in all its forms and manifestations is the way we realise our potential while laying the foundations for living and learning in the future. If we want to change our behaviours and habits, add 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 in the lifewide dimension of our life.

8 Inclusive nature of lifewide learning in living and forming

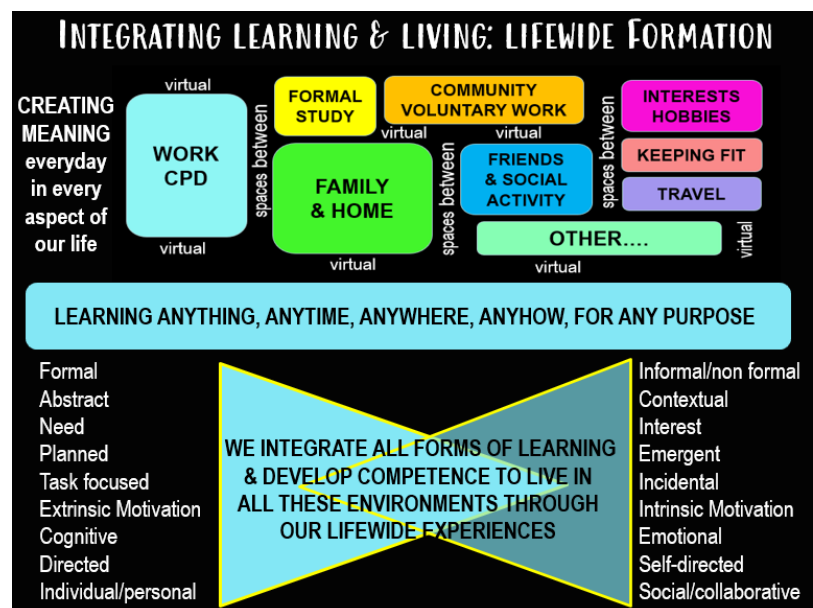
The concept of lifewide is the most comprehensive and inclusive framework within which we can understand what it means to live a rich and meaningful life and to learn and develop through all the affordances that our life provides.

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, interally 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 An ecological appreciation 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



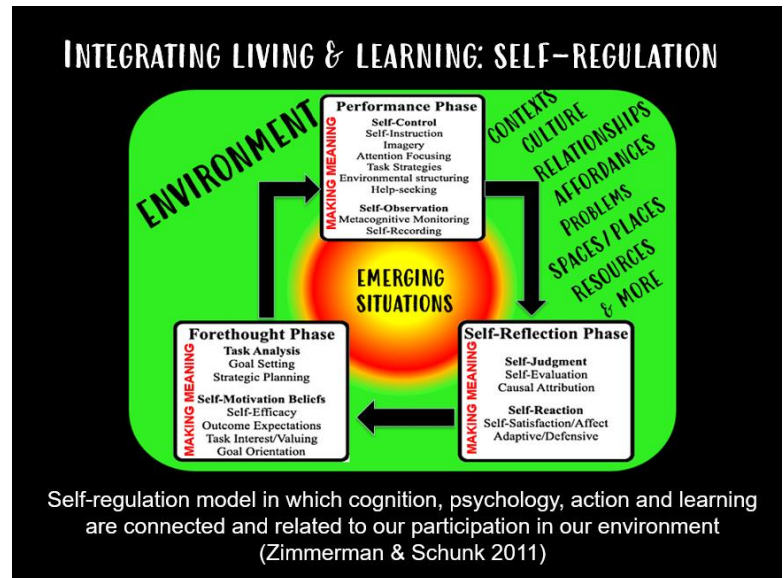
experience is always what it is because of a transaction taking place between the individual and, what at the time, constitutes the environment" (1934 p.43). "When we experience something we act upon it, we do something; then we suffer or undergo the consequences. We do something to the thing and then 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.

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.

10 A model of self-regulation within which learning and the making of meaning are embedded

The complex interplay of cognition, psychology and actions within Eraut's heuristic is revealed by the well researched, social cognitive psychological model of self-regulation. The cyclical model includes three general phases: forethought, performance and self-reflection (Zimmerman 2000, Zimmerman and Schunk 2011). The model reveals the complex interplay of cognitive and psychological processes that influence the action we chose to take. Without the will to try and do something and the belief that it is both worth trying and there is a good chance of being successful, there will be no action, and no experience to learn from.

During forethought we perceive the environment/situation and attempt to interpret meanings and draw on these as we make decisions about how we will act. Decisions are made according to our understandings of the tasks that are necessary and our beliefs in whether we can undertake such tasks effectively, and whether the results will be worth our efforts. Beliefs, interests and values all play a part in our decisions on whether and how to act.



During performance or action we implement our plan drawing on a range of learned practices but we may have to try new practices and teach ourselves how to do something we haven't done before or seek help from others. To accomplish our task we may need to modify the environment in some way. We continue to perceive and interpret the effects of our actions making new meanings and adapting our actions or the environment where necessary. Our capacity to make meaning extends beyond our experience of situations in real time. After an event we are able to mentally reconstruct our experiences and reflect on it, and draw on other related experiences, to create deeper and more significant meanings which we can act upon in future.

Finally, and most importantly in the context of creating a life with meaning, Zittouni & Brinkmann 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).

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.

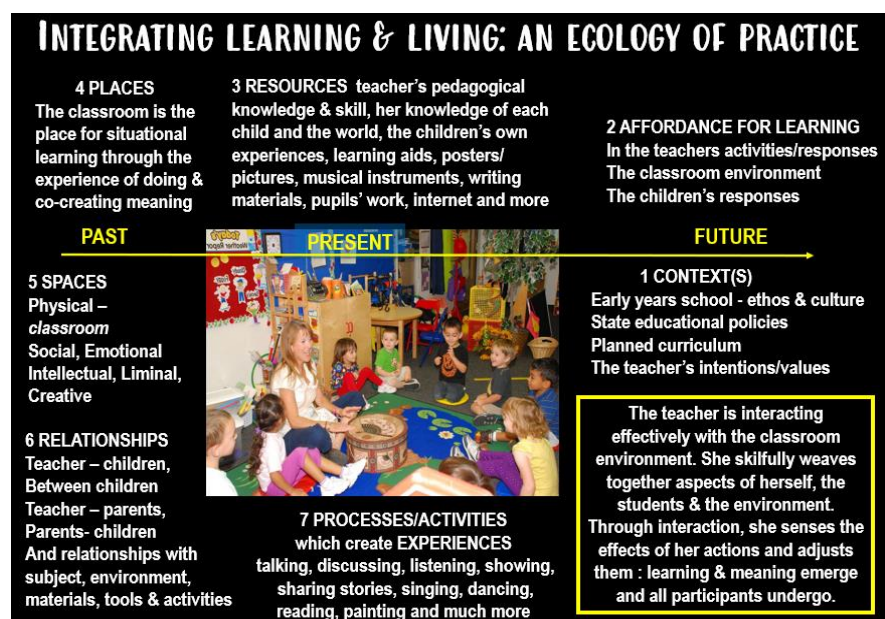
12 An ecology of practice for living, learning, making meaning & forming in a teacher's environment

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.

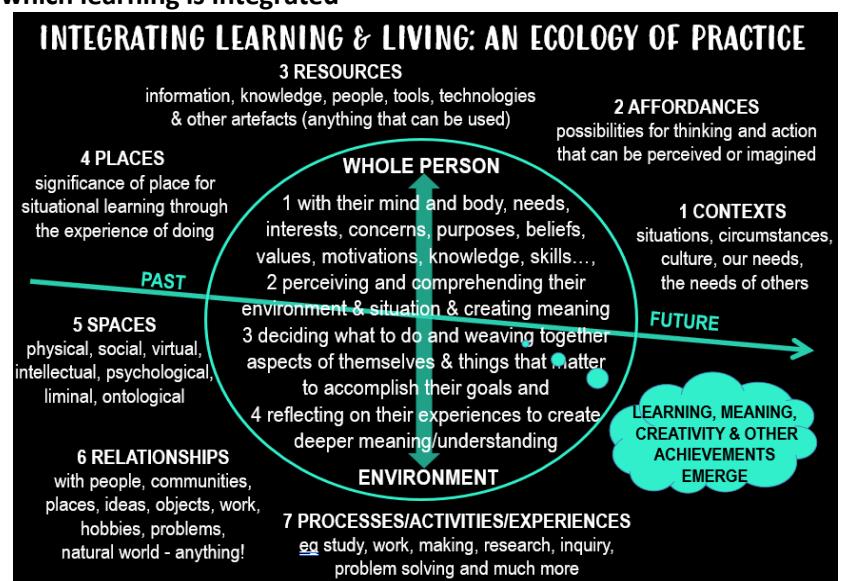
Reflecting on White’s (1959) ecological definition of competence ‘...an organism’s capacity to interact effectively with its environment’ - the ecology of practice of the teacher is a form of ecological competence necessary to perform effectively in the situations she is creating in an environment that 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 Ecology of practice heuristic with 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 The deep meaning in these ecological ideas?

As Tom Chalkley’s brilliant cartoon reveals, our hunter gatherer ancestors were more aware than us, of the ways in which their actions had consequences for their world.

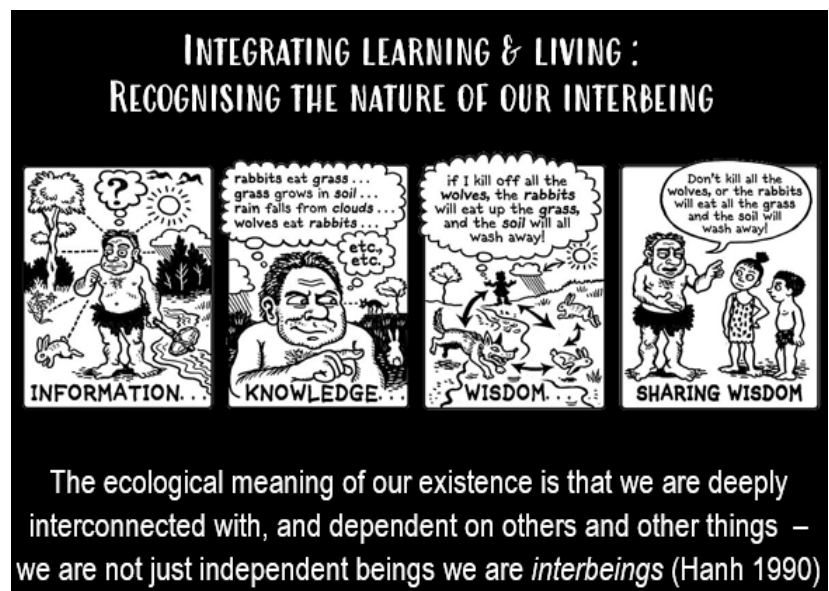
He created meaning as he experienced his world, taking information in through his senses, using his reasoning and imagination to connect, integrate, synthesise to see beyond the obvious to create wisdom that he could share with others. The cartoon reveals the ecological nature of thinking in the sense that new meaning is related to and drawn directly from our experiences as we interact with new situations and reflect on our experiences and understandings.

The deeper meaning in this cartoon’s depiction is that our

ancestor did not see himself as a *being* existing independently from the world around him, he imagined himself as an *interbeing* deeply related and connected to and dependent on the world of which he is a part. Vietnamese monk and poet Thich Nhat Hanh (1992) expresses the profound idea of interbeing by telling a story of what he could see in a sheet of paper.

If you are a poet, you will see clearly that there is a cloud floating in this sheet of paper. Without a cloud, there will be no rain; without rain, the trees cannot grow; and without trees, we cannot make paper. The cloud is essential for the paper to exist. If the cloud is not here the sheet of paper cannot be here either. So we can say that the cloud and the paper inter-are. 'Interbeing' is a word that is not in the dictionary yet, but if we combine the prefix 'inter' with the verb 'to be,' we have a new verb, inter-be.

If we look into this sheet of paper even more deeply, we can see the sunshine in it. Without sunshine, the forest cannot grow. In fact, nothing can grow without sunshine. And so, we know that the sunshine is also in this sheet of paper. The paper and the sunshine inter-are. And if we continue to look we can see the logger who cut the tree and brought it to the mill to be transformed into paper. And we see wheat. We know that the logger cannot exist without his daily bread, and therefore the wheat that became his bread is



also in the sheet of paper. The logger's father and mother are in it too. When we look in this way, we see that without all these things, this sheet of paper cannot exist.

We cannot point out one thing that is not here – time, space, the earth, the rain, the minerals in the soil, the sunshine, the cloud, the river, the heat. Everything co-exists with this paper. That is why I think the word inter-be should be in the dictionary. 'To be' is to inter-be- we cannot just be by ourselves alone. We have to inter-be with every other thing. This sheet of paper is, because everything else is.

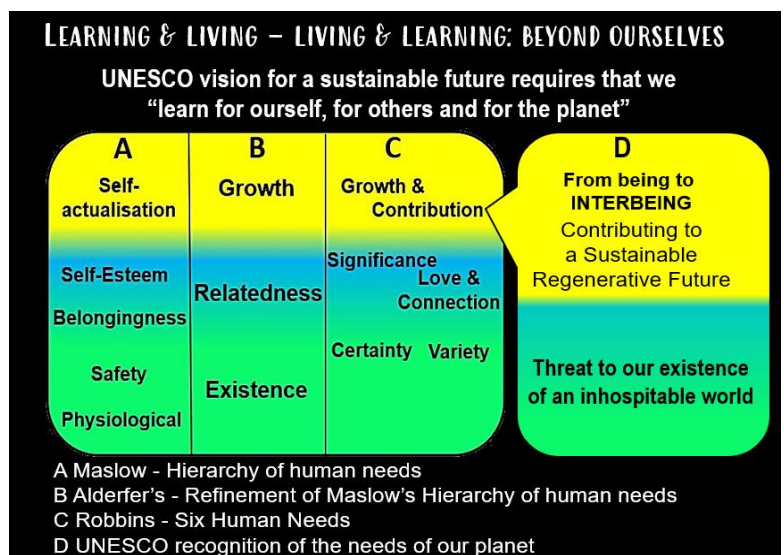
Education rarely tries to develop learners' ability to see and discover for themselves the ways in which the world is so deeply and profoundly connected, preferring to develop a more reductionist analytical world view. It is not a question of either or – we need to integrate both ways of seeing and understanding the world into forms of education that will enable this and future generations of learners to transition to a civilisation founded on ecological principles.

The moral in Tom Chalkley's visual story is that our ancient ancestor came to see that by reflecting on the way his actions had consequences for the world that had meaning to him, he would upset the delicate balance in the ecosystem of which he was a part. With this learning (ecological understanding) he adjusted his behaviours so that all life could flourish and shared his knowledge with others so that they too can help sustain the balance in the ecosystem and encourage regeneration.

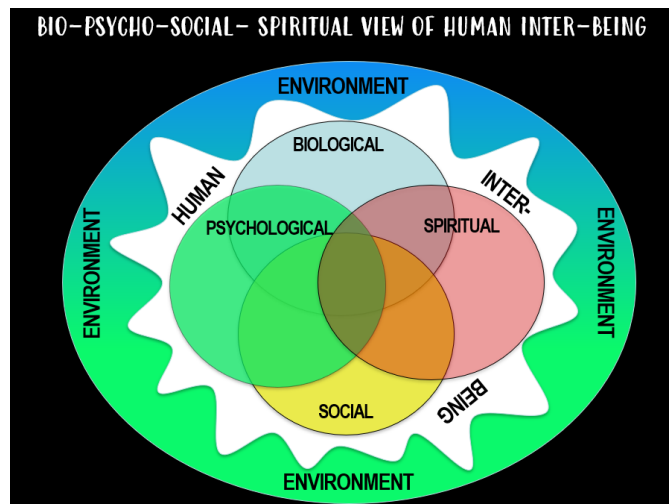
15 The UIL vision for a sustainable future in which we “learn for oneself, for others and for the planet” (UNESCO 2020 p. 14) highlights the essential role of individuals' lifelong learning to achieving a future that is sustainable and regenerative. For Barnett (2022), if learning has a purpose it is 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 through our living, 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 14) 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.



16 Interesting parallels might be drawn between this conception of a whole human being interacting with the totality of their environment in a deeply connected and interdependent way, and the bio-psycho-social-spiritual humanistic and holistic view of the human being in health sciences (Saad et al 2017). The latter holds that, “persons can be considered beings-in-relationship” (Sulmasy 2002), in other words they exist as inter-beings in relation to everything else rather than beings separate from everything else (Hanh 1992).



In the health care context, the biological aspect of a person refers to their physical health. The psychological aspect refers to their cognitive, emotional and mental health. The social aspect refers to their place in the social and cultural environment within which they are embedded, including the meaningful relationships with people in their lives. The spiritual aspect refers to a person’s non-material dimensions of being – including their values, beliefs including religious and non-religious, purposes, hopes and possibilities. Fundamentally, it engages with questions of what is the meaning of my life? Understanding people in these ways enables us to appreciate in a more profound way, the health, wellbeing, behaviour and ongoing formation (including learning and development) of people in the context of their unfolding interactions and interdependencies with their environment.

17 More holistic conceptions of lifelong learning

Holistic views of human beings/interbeings, their health and wellbeing, their needs and motivations, and their deep ecological relationships and interdependencies with their dynamic environment, require us to think more holistically about the concept of lifelong learning.

UiL’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).

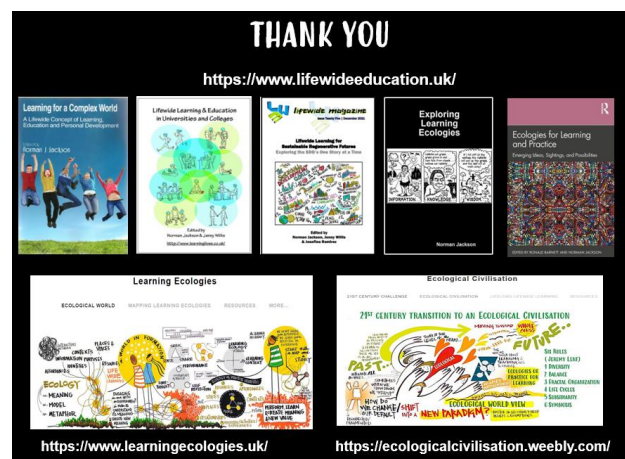
This narrative argues that Arne Carleson’s (2014) representation of lifelong learning as the integration of learning and living provides a foundation on which to build a culture that understands and values the possibilities for learning and personal or professional development in every aspect of life. Within this overarching framework, I offer two ideas: 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 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.

To privilege learning over all other things that make up a person, might be problematic. As Barnett (2022) points out, our lifelong trajectory is a trajectory of perpetual becoming and while learning is undoubtedly an essential and significant part of our becoming, we also need to develop strong inner qualities that are often dispositional and value-based in nature such as, being inquisitive and curious, having confidence and will to try and try again if not successful, being able to empathise with and wanting to help others, having resilience to bounce back from setbacks or disruptions, having the self-belief that something is possible, and having the imagination to see possibilities that others cant see, in order to tackle challenges that we cannot imagine. Our only means to build this psychological core, is to honour and utilise the affordances we have in the whole of our life and trust that what we do in our present will help us adapt to our future..

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.

18 This concludes my narrative arguing for more explicit recognition of the lifewide-ecological foundation of lifelong learning. 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/>



Sources

- Alderfer, C.P. (1969) An Empirical Test of a New Theory of Human Needs. *Organizational Behavior and Human Performance*, 4, 142-175.
- Aspin, D., Chapman, J., Evans, K., & Bagnall, R. (2012). Introduction and Overview Second international handbook of lifelong learning. Dordrecht: Springer. Available at https://discovery.ucl.ac.uk/id/eprint/10093807/3/Evans_Second%20International%20Handbook%20of%20Lifelong%20Learning%20introduction%20-%20ucl%20deposit%20version.pdf
- Banks, J., Au, K., Ball, A. F., Bell, P., Gordon, E., Gutierrez, K., Brice-Heath, S., Lee, C. D., Mahiri, J., Nasir, N., Valdes, G., & Zhou, M. (2007). Learning in and out of school in diverse environments: Life-Long, Life-Wide, Life-Deep. The LIFE Center (University of Washington, Stanford University and SRI) & the Center for Multicultural Education, University of Washington.
- Barnett, R. (2011). Lifewide education: a new and transformative concept for higher education. In: N. J. Jackson (Ed.) Learning for a Complex World: A lifewide concept of learning, education and personal development. p. 22-38 Bloomington: Authorhouse Available at: <https://www.lifewideeducation.uk/learning-for-a-complex-world.html>

- Barnett, R. (2022) The End of Learning: Living a Life in a World in Motion. In K. Evans et al. (eds.), Third International Handbook of Lifelong Learning, Springer International Handbooks of Education, Available at: https://doi.org/10.1007/978-3-030-67930-9_1-1
- Barnett, R. and Jackson, N.J. (Eds) (2020) *Ecologies for Learning and Practice: Emerging ideas, sightings and possibilities*. Routledge
- Berry, T. (1988). *The Dream of the Earth*. Berkley: Counterpoint
- Berry, T. (1999). *The Great Work: Our Way into the Future*. New York: Three Rivers Press
- Carlsen, A. (2014) Lifelong Learning UNESCO Institute for Lifelong Learning Technical Note. Available at: <https://uil.unesco.org/fileadmin/keydocuments/LifelongLearning/en/UNESCOTechNotesLLL.pdf>
- Delors, J. et al. 1996, *Learning: The Treasure Within*. Report to UNESCO of the International Commission on Education for the Twenty-First Century. Paris, UNESCO.
<http://unesdoc.unesco.org/images/0010/001095/109590eo.pdf>
- Dewey, J. (1916), (2007 edition) *Democracy and Education*, Teddington: Echo Library
- Dewey, J. (1934). *Art as Experience*. New York: Penguin.
- Dewey, J. (1938), (1997 edition) *Experience and Education*, New York: Touchstone.
- Eraut, M. (2004) Informal learning in the workplace. *Studies in Continuing Education* 26(2) p247-273. Available at https://www.researchgate.net/publication/233317772_Informal_Learning_in_the_Workplace
- Eraut, M. & Hirsh, W. (2008) *The Significance of Workplace Learning for Individuals, Groups and Organisations* SKOPE Monograph
<http://www.skope.ox.ac.uk/wordpress/wpcontent/uploads/2014/12/Monogrpah-09.pdf>
- EU (2000) A Memorandum on Lifelong Learning, Commission of the European Communities Available at: <https://uil.unesco.org/i/doc/lifelong-learning/policies/european-communities-a-memorandum-on-lifelong-learning.pdf>
- Evans K (2022) Human Strivings and Social Change: Scenarios for Renewal in Lifelong Learning. In, K. Evans et al. (eds.), Third International Handbook of Lifelong Learning, Springer International Handbooks of Education, https://doi.org/10.1007/978-3-030-67930-9_11-2
- Faure, E. et al., 1972, *Learning to Be: The World of Education Today and Tomorrow*. Paris, UNESCO.
<http://unesdoc.unesco.org/images/0022/002232/223222e.pdf>
- Hanh, T.N. (1992). *Peace is Every Step: The Path of Mindfulness in Everyday Life*. New York: Bantam Books Available at https://archive.org/stream/PeacelsEveryStep-ThichNhatHanh/ThichTextNew_djvu.txt
- Ingold, T. (2000) Hunting and gathering as ways of perceiving the environment. *The Perception of the Environment. Essays on livelihood, dwelling and skill* Routledge
- Ingold, T. (2011). *The perception of the environment: Essays on livelihood, dwelling and skill*. London, UK: Routledge. (Original work published 2000)
- Jackson, N. J. (Ed) (2011) *Learning for a Complex World: A Lifewide Concept of Learning, Education and Personal Development*. Bloomington: Authorhouse. p.1-21 Retrieved from <https://www.lifewideeducation.uk/learning-for-a-complex-world.html>
- Jackson N. J. (2016, 2019) *Exploring Learning Ecologies* Betchworth: Chalk Mountain Available at <https://www.lifewideeducation.uk/exploring-learning-ecologies.html>
- Jackson, N.J. (2020a) *Ecologies for: Emerging ideas, sightings and possibilities* Routledge p81-96 *Learning and Practice in Higher Education Ecosystems* Chapter 6 in R. Barnett and N J Jackson (Eds) *Ecologies for Learning and Practice*
- Jackson, N.J. (2020b) *From Ecologies of Learning to Ecologies of Creative Practice* Chapter 12 In R. Barnett and N J Jackson (Eds) *Ecologies of Learning and Practice: Emerging Ideas, Sightings and Possibilities* Routledge
- Jackson, N.J. (2022) *Steps To An Ecology of Lifelong-Lifewide Learning for Sustainable, Regenerative Futures* In K. Evans, Lee, W.O. Markowitsch, J. & Zukas M. (Eds) Third International Handbook of Lifelong Learning Springer Available at https://link.springer.com/referenceworkentry/10.1007/978-3-030-67930-9_15-1
- Korten, D. (2021) *Ecological Civilisation: From Emergency to Emergence*
<https://davidkorten.org/ecological-civilization-from-emergency-to-emergence/>
- Lave, J. 1988. *Cognition in Practice*. Cambridge, UK: Cambridge University Press.
- Lemke, J. L. (1997). *Cognition, context, and learning: A social semiotic perspective*. In D. I. Kirshner & J. A. Whitson (Eds.), *Situated cognition: Social, semiotic, and psychological perspectives* (pp. 37–55). Lawrence Erlbaum Associates Publishers.
- Lemke, J. (2015). *Feeling and Meaning: A Unitary Bio-Semiotic Account*. In: Trifonas, P. (Eds) *International Handbook of Semiotics*. Springer, Dordrecht. https://doi.org/10.1007/978-94-017-9404-6_27 589-616
- Lent, J. (2021a). *What Does An Ecological Civilization Look Like?* YES Magazine Spring 2021 Available at: <https://www.yesmagazine.org/issue/ecological-civilization/2021/02/16/what-does-ecological-civilization-look-like>

- Lent, J. (2021b) *The Web of Meaning* London:Profile Books
- Lindeman, C. (1926). *The Meaning of Adult Education*. New York: New Republic (1989 edn) Oklahoma Research Center for Continuing Professional and Higher Education.
- Luksha, P., Cubista, J., Laszlo, A., Popovich, M., & Ninenko, I. (2017). *Educational Ecosystems for Societal Transformation* Global Education Futures. Retrieved from https://campfireconvention.uk/sites/default/files/GEF%20Vision%20Educational%20Ecosystems%20for%20Societal%20Transformation-ilovepdf-compressed_1.pdf
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370-96
- McNeill, J. R. (2014). *The Great Acceleration: An Environmental History of the Anthropocene since 1945*.
- Robbins, T. (2018) *The 6 Human Needs* <https://www.youtube.com/watch?v=UdhGTvuUOys>
- Rockström, J. & Gaffney, O (2021) *Breaking Boundaries: The Science of Our Planet*. DK
- Saad M, de Medeiros R, Mosini AC. Are We Ready for a True Biopsychosocial-Spiritual Model? The Many Meanings of "Spiritual". *Medicines (Basel)*. 2017 Oct 31;4(4):79. doi: 10.3390/medicines4040079. PMID: 29088101; PMCID: PMC5750603.
- Steffen, W., Broadgate, W., Deutsch, L., Gaffney, O., & Ludwig, C. (2015). The trajectory of the Anthropocene: The Great Acceleration. *The Anthropocene Review*, 2(1), 81–98. <https://doi.org/10.1177/2053019614564785>
- Sulmasy, D.P. (2002) A Biopsychosocial-Spiritual Model for the Care of Patients at the End of Life, *The Gerontologist*, Volume 42, Issue suppl_3, October 2002, Pages 24–33, Available at: https://doi.org/10.1093/geront/42.suppl_3.
- Susskind, D. (2020). *A world without work: Technology, automation, and how we should respond*. London: Penguin Random House
- Tindemans B and Dekoeker V (2020) *The learning society* Centre of Expertise on Innovative Learning Pathways Available at https://www.oecd.org/skills/centre-for-skills/The_Learning_Society.pdf
- UN General Assembly Resolution 70/1. (2015) *Transforming our world: the 2030 Agenda for Sustainable Development* Available at: https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_RES_70_1_E.pdf
- UNESCO. (2020a). *Embracing a culture of lifelong learning: Contribution to the futures of education initiative report. A transdisciplinary expert consultation*. Paris, France: UNESCO Institute for Lifelong Learning. Available at: <https://www.sdg4education2030.org/embracingculture-lifelong-learning-uil-september-2020>
- UNESCO. (2020b). *Education for sustainable development: A Roadmap*. Paris, France: UNESCO Institute for Lifelong Learning. Paris France UNESCO Available at: <https://en.unesco.org/themes/educationsustainable-development>
- UNESCO Futures of Education Commission. (2021). *Reimagining our futures together: A new social contract for education*. Paris, France: UNESCO. Available at: <https://unesdoc.unesco.org/ark:/48223/pf0000379707>
- Vitello, S., Grotzer, J., & Shaw, S. (2021). *What is competence? A shared interpretation of competence to support teaching, learning and assessment*. Cambridge University Press & Assessment. Retrieved from <https://www.cambridgeassessment.org.uk/Images/645254-what-is-competence-a-shared-interpretation-of-competence-to-support-teaching-learning-and-assessment.pdf>
- White, R. W. (1959). Motivation reconsidered: the concept of competence. *Psychological Review*, 66, 279–333.
- Zimmerman, B. J. (2000). *Attaining Self-Regulation: A Social Cognitive Perspective*. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of Self-Regulation* (pp. 13–39). San Diego: Academic Press.
- Zimmerman, B. J., & Schunk, D. H. (Eds.). (2011). *Handbook of self-regulation of learning and performance*. Routledge/Taylor & Francis Group.
- Zittouni T. & Brinkmann S (2012) *Learning as Meaning Making*. In N.M. Seel (ed) *Encyclopedia of the Sciences of Learning* pp 1809-1811.

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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.lifewideeducation/inn.html>

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