

The Challenge of Preparing Learners for a Lifetime of Learning *Lifewide & Ecological Perspectives on Learning, Education & Practice* Norman Jackson

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THE CHALLENGE OF PREPARING LEARNERS FOR A LIFETIME OF LEARNING

***Lifewide & Ecological Perspectives
on Learning, Education & Practice***

Norman Jackson

slides & narrative at <http://www.normanjackson.co.uk/ntu.html>

over the world but it has now come of age as we comprehend the speed of change and turbulence in the world around us and contemplate a future for our students that will take them towards the end of the century. If the moral purpose of education is to make a positive difference to learners lives then surely that responsibility should extend to helping them sustain themselves as learners throughout their life.

There are many ways of approaching this problem and there are no right or wrong answers. Every teacher and learner, every institution and higher education system must invent their own solutions. I will share with you the thinking I have developed and tried out over the last 15 years in the hope that some of the ideas might resonate with you and you will adapt them and make them your own.

My talk is in two parts

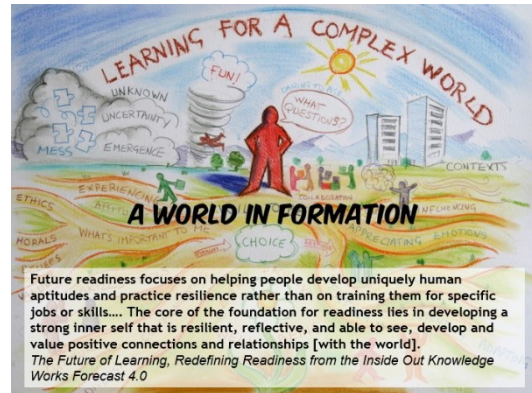
- 1 Exploration of the idea of lifelong and its companion lifewide learning, taking in some of the research on lifelong and lifewide learning and learning ecologies
- 2 Try to show how the ideas of lifewide learning and learning ecologies are not only relevant to this challenge, but they provide conceptual tools for the design of learning experiences.

1 I am delighted to be given this opportunity to make a contribution to your conference which is aiming to explore the idea of 'Lifelong learning: pedagogies for the future'. I interpret this to mean the teaching and learning practices that will enable learners to develop into willing, capable, confident and effective learners throughout long, complex and challenging learning lives.

This challenge is a perpetual and universal challenge affecting education systems all

2 We drew this picture on the wall of the SCEPTrE Centre at the University of Surrey in 2006. It symbolically represents the milieu we and our learning are immersed in.

Another way of expressing the idea of complexity is a world in formation in which everything is forming and reforming including ourselves, our lives and our work.



I believe that enabling learners to prepare themselves for a world that is forming in 30 or 40 years time is **the fundamental challenge facing educators and educational institutions all over the world**. It has all the qualities of a wicked problem in so far as its difficult or impossible to solve because of incomplete, contradictory, and changing requirements that are often difficult to recognize. There are no right and wrong answers only many possibilities and all the stakeholders might have a different answer, it's a problem that engages the whole system from bottom to top.

For teachers it is associated with a question like 'how do we prepare our students for an ever more complex world?'... not just for their first job when they leave university but for jobs and life in 2, 3, 4 or even 5 decades time. How do we prepare them so that they can face and adapt to the many challenges they will encounter over a lifetime of working, learning and living.

From the students' perspective the same challenge is expressed in the question 'How do I prepare myself for the rest of my life?'... what sorts of things do I need to learn? what sorts of skills, qualities, dispositions and values do I need to develop? and what sorts of experiences do I need to have?

Institutional managers and policy makers are concerned with the same question in terms of the physical environment, supporting infrastructure, resources and policies that need to be put in place to enable this goal to be achieved. And at the system level, Government and its agencies are concerned to know that everything is being done to lay the foundations for future economic, social and cultural prosperity.

One of the features of this drawing is it shows the learner embedded in their world. I didn't realise it at the time but I have increasingly come to see this as an ecological phenomenon. We can't separate learning from our involvement and actions in the world. Anthropologist Tim Ingold gets it right when he says "organism plus environment" should denote not a compound of two things, but one indivisible totality." It's this indivisible totality that provides us with the foundation for viewing learning as an ecological phenomenon.

The world provides us with our contexts, our resources, our problems and challenges, our opportunities and our affordances - the possibilities for us to act, achieve, create. Our world

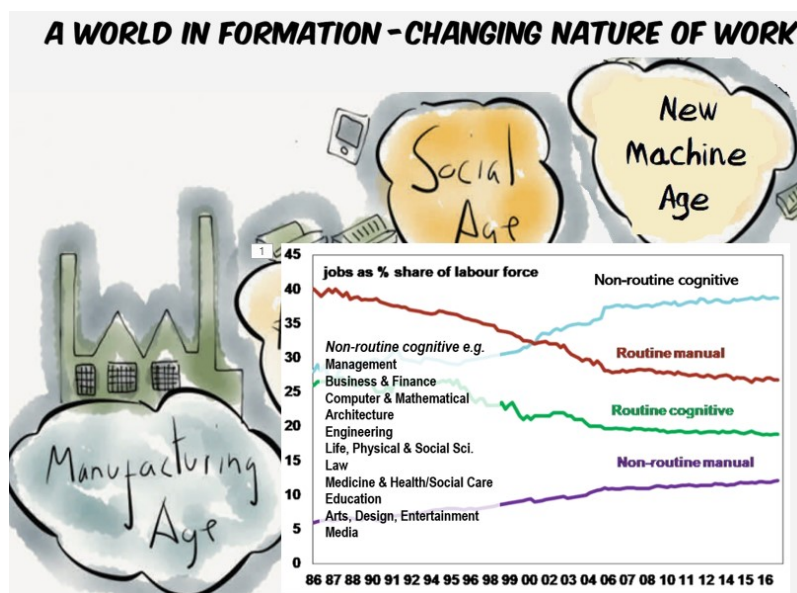
and the things in it stimulate our imaginations and our emotions creating powerful feelings that motivate us to do all manner of things.

Our relationships and interactions with the world around us are fundamental to our learning, our identity and continued development as a person. Its our relationships with the ever changing world that create the will to learn and to keep on learning or conversely suppress our desire to learn. And its our relationships and interactions with the world that are the source of our creativity.

So developing ourselves so that we can take whatever the next steps might - is a never ending process. But the undergraduate higher education experience is a particularly important point as it straddles that important period in our lives where we become more independent and where most of determine roughly the initial direction we want to go in.

This quote from a Foresight report published in the US resonates with the idea of developing learners as whole people which is at the core of my ideas.

“Higher education institutions need to strike a balance between helping learners enter the current job market while at the same time helping them lay the foundation for ‘future readiness’. **Future readiness focuses on helping people develop uniquely human aptitudes and practice resilience rather than on training them for specific jobs or skills.... The core of the foundation for readiness lies in developing a strong inner self that is resilient, reflective, and able to see, develop and value positive connections and relationships [with the world].** *The Future of Learning, Redefining Readiness from the Inside Out Knowledge Works Forecast 4.0* Available at: <https://knowledgeworks.org/resources/future-learning-redefining-readiness/>



3 A world in formation is an apt metaphor for the fluidity and turbulence of the world of work. In my lifetime I have witnessed massive changes in the evolution of work. As we have emerged from a long industrial/ manufacturing age, into the information and knowledge age, and more recently the social age as social media technologies have been universally adopted. Ahead of us we are facing our greatest challenge

as we enter the ‘new machine age’.. We are already living alongside machines but machines and associated AI will become increasingly important.

The fluidity of the work environment will only increase as we progress through this century and for most people this will be most serious adaptive challenge in their lifetime. There is a well known saying that most of the jobs our graduates will perform have not yet been invented. Well guess what the top 10 titles for positions on Linked In were not invented even 5 years ago.

Even in what might be termed stable professions like medicine the amount and pressure to change and adapt today is huge. The very reasons people entered the profession 30 years ago are being tested and this challenge to personal values as well as imposed changes to practice often pushes people out.

Changing preferences for autonomy, and the ability to find meaningful work that satisfies those preferences, are also starting to redefine traditional career paths. Many individuals have left large companies for smaller firms or become self-employed as the traditional promises of stability, income and career progression, health care, and training and development opportunities once tied to large companies have been broken. In addition, retirement-age workers who do not retire, either because of financial needs or a desire to continue to make an impact, are also moving from large companies with retirement programs to smaller businesses or self-employment...The switch from large to small or independent often requires a new skill set even when the occupation builds off of experiences in a former job or role. Independent workers, as much as their employed peers, continue to need professional development and learning opportunities to maintain and refresh skills, but they have to seek it from external sources.

John Hagel III, John Seely Brown, Roy Mathew, Maggie Wooll & Wendy Tsu (2015) *The Lifetime Learner*. The Atlantic available at:
<https://www.theatlantic.com/sponsored/deloitte-shifts/the-lifetime-learner/256/>

We anticipate that most students graduating today will have many jobs in their lifetime, and are likely to have to change the direction of their career several times and reinvent themselves and their identity. They may well also be subject to severe disruptions and experience being out of work.

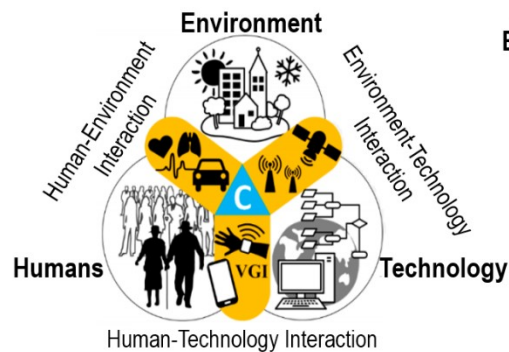
Most graduates are aspiring to work in what are termed **cognitive non-routine activities**. Work that isn't predictable that requires people to work with uncertainty and interact in an intelligent, self aware and creative way with their environment and the problems it contains. The good news is that this is one of two growth areas in the labour market in developed economies all over the world.

Its this non-routine cognitive domain I will be focusing on in my talk as this is the domain that is most relevant to the HE learning enterprise.

4 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.

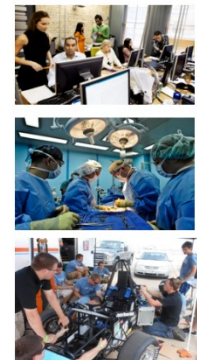
The idea of ecosystems forces us to think of the whole system and the relationships, interactions and flows of information and resources within it all of which are essential to learning.

A WORLD IN FORMATION - NEW LEARNING ECOSYSTEMS

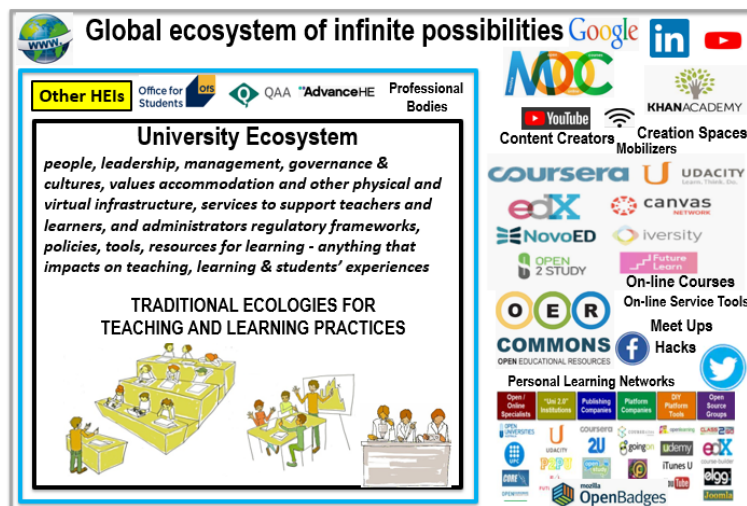


An ecosystem is a community of living things interacting with non-living things in a particular space and time

Example Human Ecosocial Systems



A WORLD IN FORMATION - NEW ECOSYSTEMS FOR LEARNING



5. Higher Education is a specialised ecosocial system and a key social infrastructure. Embedded within it are agencies that regulate and help develop the system and the institutions each of which comprises its own ecosystem.

University ecosystems are fairly stable over time - change is managed, regulated and resisted. But change in the outside world is profound.

What I am calling the global ecosystem of infinite possibilities for learning has changed beyond all recognition in the last 2 to 3 decades through the growth of the internet and an ever expanding number of internet platforms all providing services to learners, mobile technologies and ubiquitous internet access. With this pace of technological change we cannot begin to imagine a world 30 - 40 years from now. All we can imagine is that people will have to somehow keep a breast of developments in new technologies.

A key question is how will universities adapt to the emerging ecosystem full of educational players largely independent of the traditional educational landscape? Another might be, how will HE learners make use of the emerging global ecosystem for learning?

A university ecosystem is designed to encourage and support learning. Universities are long lived organisations and in some ways they have changed relatively little over decades. They include physical spaces such as classrooms, lecture theatres, laboratories, computer rooms and specialist rooms - like workshops, dance studios and music rehearsal rooms. We must also include the virtual spaces the institution has created to enable people to interact and learn. There are also libraries and learning resource centres and informal social spaces such as cafes, bars, and even outside public spaces where people meet and talk. But these spaces are just one part of a complex socio-material environment which includes tools and other materials necessary for learning, rules that govern behaviour and practice (policies, procedures, regulations and administrative frameworks), and culture (the unspoken rules and the ways in which things are done). Together, these elements create an environment within which teachers teach and continually develop their practices, and learners learn and develop themselves. A university influences but does not control the learning ecologies of its learners or its ecologies of learning and practice of its teachers.

Barnett & Jackson (in press)

Sources

Barnett R and Jackson N J (in press) Ecologies for Learning and Practice: Emerging Ideas, Sightings and Possibilities Routledge

John Hagel III, John Seely Brown, Roy Mathew, Maggie Wooll & Wendy Tsu (2015) The Lifetime Learner. The Atlantic available at:

<https://www.theatlantic.com/sponsored/deloitte-shifts/the-lifetime-learner/256/>

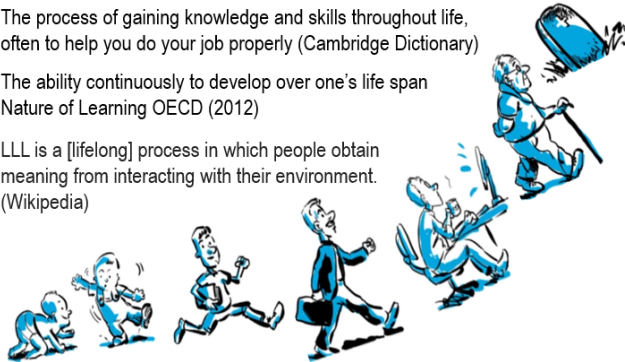
LIFELONG LEARNING

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

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

The ability continuously to develop over one's life span
Nature of Learning OECD (2012)

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

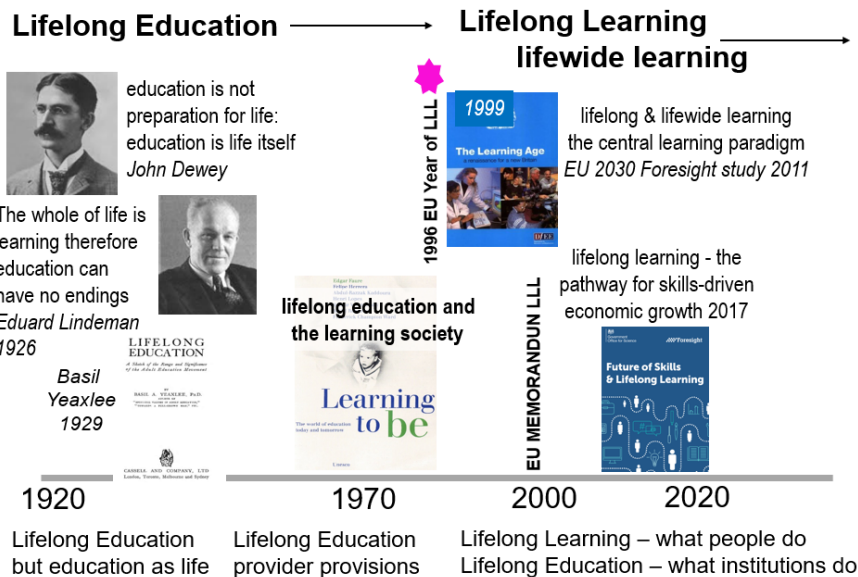


6 There are many definitions of lifelong learning we all understand it as a continuous life process that begins when we are born and only ends when we die. These four definitions provide an initial flavour of the scope and emphasis of the idea. They are all perfectly acceptable first approximations but I am particularly interested in the definition that is concerned with creating meaning through interactions with our environment.

7 Every idea has a history

Excellent background material provided by Smith, M. K. (1996, 2001) 'Lifelong learning', the encyclopedia of informal education, <http://www.infed.org/lifelonglearning/b-life.htm>.

LIFELONG LEARNING - HISTORY OF CORE CONCEPTS



100 years ago the philosopher John Dewey laid the foundations for understanding learning in an experiential way. His thinking influenced a number of adult educators who developed the idea of lifelong education amongst them Eduard Lindeman in the USA and Basil Yeaxlee in UK.

These practitioners were not intending to merely extend the formal structures of education to embrace lifelong needs but to change the very concept of education to embrace informal and non-formal opportunities for learning. Eduard Lindeman (1926) wrote

1. **Education is life:** 'not merely preparation for an unknown kind of future living... The whole of life is learning, therefore education can have no endings. (Lindeman 1926: 4-5)
2. **Adult education should be non-vocational:** 'Education conceived as a process coterminous with life revolves around non-vocational ideals... adult education more

accurately defined begins where vocational education leaves off. Its purpose is to put meaning into the whole of life' (ibid.: 5).

3. **We should start with situations not subjects:** 'The approach... will be via the route of situations, not subjects... In conventional education the student is required to adjust himself to an established curriculum; in adult education the curriculum is built around the student's needs and interests' (ibid.: 6).
4. **We must use the learner's experience:** 'The resource of highest value in adult education is the learner's experience... all genuine education will keep doing and thinking together' (ibid.: 6-7)

In the UK the adult educator Basil Yeaxlee adopted these ideas in the first book to be published on Lifewide Education.

Much adult education will never know itself as such, and will be recognized only by leaders and teachers of real insight. It will go on in clubs, churches, cinemas, theatres, concert rooms, trade unions, political societies, and in the homes of the people where there are books, newspapers, music, wireless sets, workshops, gardens and groups of friends. (Yeaxlee 1929: 155)

Three key features stand out in accounts of lifelong education: First, lifelong education is seen as building upon and affecting all existing educational providers, including both schools and institutions of higher education... Second, it extends beyond the formal educational providers to encompass all agencies, groups and individuals involved in any kind of learning activity... Third, it rests on the belief that individuals are, or can become, self-directing, and that they will see the value in engaging in lifelong education. (Tight 1996: 36)

Lifelong education was taken up as a central organizing idea by UNESCO in 1970 and the report Learning to Be by Edgar Faure (1972).

The commission laid stress above all on two fundamental ideas: lifelong education and the learning society. Since studies can no longer constitute a definitive 'whole', handed out to and received by a student before he embarks on adult life, whatever the level of his intellectual equipment and the age at which he does so, educational systems must be thought out afresh, in their entirety, as must our very conception of them. If all that has to be learned must be continually re-invented and renewed, then teaching becomes education and, more and more, learning. If learning involves all of one's life, in the sense of both time-span and diversity, and all of society, including its social and economic as well as its educational resources, then we must go even further than the necessary overhaul our 'educational systems' until we reach the stage of a learning society.

The idea of the learning society encouraged the idea that learning itself was the fundamental idea. Through 1970's interest began to focus on learning viewed as a cognitive process internal to the learner, that can occur 'both incidentally and in planned educational

activities', while, 'it is only the planned activities we call.. education' (Merriam and Brockett 1997: 6).

1996 EU declared the year of lifelong learning and encouraged open discussion about the concept. The discussion helped to frame the EU's position on LLL much of this discourse was framed within a skills and employability for life agenda.

2000 by EU Commission A Memorandum on Lifelong Learning in which LLL was framed in terms of the knowledge age.

- Lifelong learning must accompany a successful transition to a knowledge-based economy and society.
- Lifelong learning is no longer one aspect of education and training; it must become the guiding principle for provision and participation across the full continuum of learning contexts.
- Two equally important aims for lifelong learning: promoting active citizenship and promoting employability.

This memorandum recognised 3 categories of learning activity - formal, non-formal and informal and embraced the idea that all should be recognised and valued. It also acknowledged for the first time the lifewide dimension of learning.

The term 'lifelong' learning draws attention to time: learning throughout life, either continuously or periodically. The newly-coined term 'lifewide' learning enriches the picture by drawing attention to the spread of learning, which can take place across the full range of our lives at any one stage in our lives. The 'lifewide' dimension brings the complementarity of formal, non-formal and informal learning into sharper focus. It reminds us that useful and enjoyable learning can and does take place in the family, in leisure time, in community life and in daily worklife. Lifewide learning also makes us realise that teaching and learning are themselves roles and activities that can be changed and exchanged in different times and places

Reference: Lifelong Learning and Lifewide Learning, National Agency for Education, Stockholm, January 2000.

The shift in thinking reflected a growing realization that education, as developed in our formalised systems cannot provide for everyone's learning needs and therefore interest grew in learning beyond the classroom.

This idea was seized by New Labour thinkers like Tom Bentley (1998) (head of Demos and a former special advisor to David Blunkett). He describes 'Labour's learning revolution' as follows:

It requires a shift in our thinking about the fundamental organizational unit of education, from the school, an institution where learning is organized, defined and contained, to the

learner, an intelligent agent with the potential to learn from any and all of her encounters with the world around her. (Reported in The Economist, October 9, 1999, page 42)

Lifewide learning began to emerge as a serious idea in the policy world in 2000. A report by the Swedish National Agency for Education. The idea was picked up and amplified by the EU Memorandum on Lifelong Learning also in 2000. Richard Desjardins (2004), utilised the idea of lifewide learning in his conceptual framework for the economic evaluation of lifelong learning and these ways of thinking were incorporated into a number of reports by the Organisation for Economic Co-operation and Development for example (OECD 2007:10).

Learning does not occur just in school - it is both 'lifewide' (ie it occurs in multiple contexts, such as work, at home and in our social lives) and 'lifelong' (from cradle to grave). These different types of learning affect each other in a wide variety of ways. Their impact in terms of the outcomes of learning is equally complex

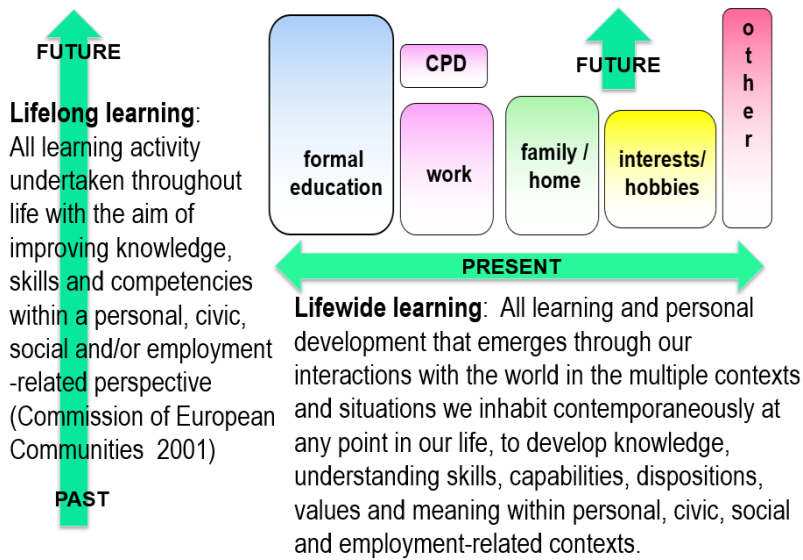
In 2010 the EU commissioned a Foresight study drawing on leading thinkers in the world of education and informal learning. The report of this study, 'The Future of Learning: Preparing for Change' (Redecker et al 2011) incorporated the concept of lifewide learning into its central learning paradigm.

The future of learning : The overall vision is that personalisation, collaboration and informalisation (informal learning) will be at the core of learning in the future. These terms are not new in education and training but they will become the central guiding principle for organising learning and teaching. **The central learning paradigm is thus characterised by lifelong and lifewide learning and shaped by the ubiquity of Information and Communication Technologies (ICT).** At the same time, due to fast advances in technology and structural changes to European labour markets related to demographic change, globalisation and immigration, generic and transversal skills are becoming more important. These skills should help citizens to become lifelong learners who flexibly respond to change, are able to pro-actively develop their competences and thrive in collaborative learning and working environments.

It would appear that there has been a shift in the policy world from the idea that lifewide learning is implicit within the lifelong learning paradigm to seeing it as an explicit dimension, worthy of consideration and implementation in its own right.

The educational value of lifewide learning is that we are able to connect back to philosophical foundations of John Dewey and Eduard Lindeman's practical understandings of the way there are no endings to education.

LIFELONG & LEFWIDE LEARNING



8 Making the lifewide dimension of learning explicit within the lifelong concept,

Lifelong is the continuous journey from cradle to grave - the progressive changes we make as we journey through life. Lifewide learning adds important detail to the broad 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 clubs or societies, travelling and taking holidays and looking after their own wellbeing mentally, physically and spiritually. So the timeframes of lifelong learning and the multiple spaces of lifewide learning will characteristically intermingle and who we are and who we are becoming are the consequences of this intermingling.

We live out our lives in these different spaces and most people have the freedom to choose which spaces we want to occupy and how we want to occupy them. In these spaces we make decisions about what to be involved in, we meet and interact with different people, have different sorts of relationships, adopt different roles and identities, and think, behave and communicate in different ways. In these different spaces we encounter different sorts of challenges and problems, seize, create or miss opportunities, and aspire to live and achieve our ambitions. It is in these spaces that we create the meaning that is our life. Different spaces, different temporal rhythms, managing our lives

The learning experiences that an individual undergoes simultaneously will themselves be associated not only with different timeframes but with forms and spaces of learning that have different rhythms. For example in the space of 24 hours 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, socialise with friends, travel on public transport or by car, play some sport and do any number of things in different sorts of spaces, not to mention the virtual spaces we access through our smart phones, computers or other devices.

Each of these activities has their 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. So lifewide learning helps us develop capability to manage ourselves and our lives. Banks et al in a report for the NSF Funded Life Centre Learning In and Out of School (2007) tell us that lifewide learning includes:

'experience in the management of ourselves and others, of time and space, and of unexpected circumstances, turns of events, and crises. This learning brings skill and attitudinal frames for adaptation. Here we figure out how to adapt, to transport knowledge and skills gained in one situation to another, and to transform direct experience into strategies and tactics for future use.'

So it is through our lifewide activity and experiences that we learn to manage our busy lives, cope with the unexpected, adapt to situations as they emerge and transfer our understandings and capabilities between different contexts, and use this self-knowledge in planning for the future.

So the timeframes of lifelong learning and the multiple spaces of lifewide learning will intermingle and who we are and who we are becoming are the consequences of this intermingling.

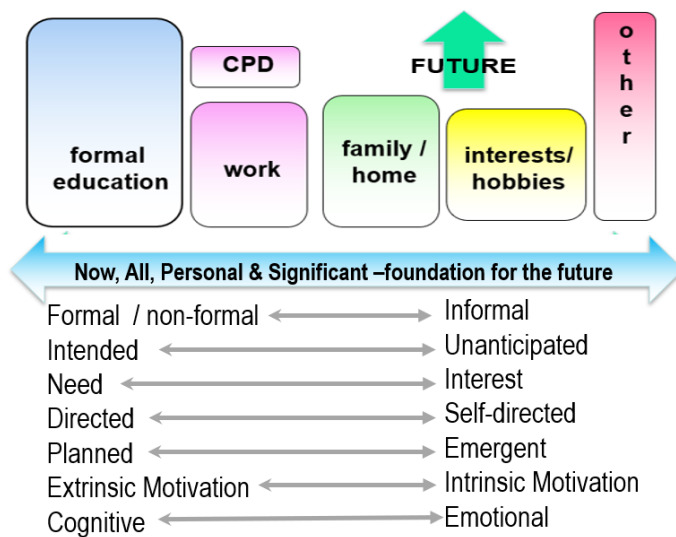
Some people might argue that lifelong learning subsumes lifewide learning. But the fact is that in subsuming it we deny its existence. By articulating and exploring it conceptually and practically, we can use it in our educational thinking in a way that simply talking about lifelong learning does not help us.

Source

Jackson N J (Ed) (2011) *Learning for a Complex World: A Lifewide Concept of Learning, Education and Development* Authorhouse

LIFEWIDE LEARNING

CREATING MEANING EVERY DAY ACROSS THE WHOLE OF OUR LIVES



9 I believe that the concept of lifewide is the most comprehensive and inclusive framework within which we can understand learning and personal development. **Because of this it provides the foundation for understanding the nature of lifelong learning and provides endless opportunities to develop ourselves for a lifetime of learning.**

Our planning and aspirations for personal and professional development aimed at creating better versions of ourselves and our reflections on how we have developed lie in the lifelong dimension but our actual personal and professional development and the means by which we try to achieve that better version of ourselves lies in our day to day, thinking, activities and experiences. It is in this dimension that we live and develop our identity. In this dimension we experience and have to cope with our emotions.

The lifewide dimension contains all the circumstances of our current life and determine who we are. But because we can influence them we can change or add to these circumstances in this way it is the lifewide dimension that enables us to be who we are and become who we would like to be. The lifelong dimension merely shows us who we became and helps us make sense of our journey.

These ideas clearly locate learning and development in particular contexts and situations in our lives. But its our capacity to reflect on experiences and create narratives from which we are able to extract new meaning that enables us to integrate and apply our learning to other situations.

LLL - WHAT DOES RESEARCH TELL US?

Learning Lives Project 2010-13

What learning means and does in the lives of adults

117 adults 25-84 years old

Biographical approach

528 interviews 4-5 x 2hr interviews per person 36 months

Learning of some sort ubiquitous in people's lives

Much learning tacit and routinised; often goes unrecognised

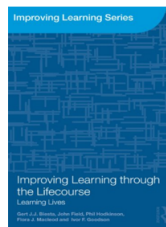
Everyone has a unique learning trajectory

Major life changes / transitions trigger need for learning

Adults have wildly different dispositions towards learning.

- For most people learning is a fact of life – continually striving to deal with problems rather than learning for itself – learning is a byproduct of doing stuff
- For a minority sense of being a learner is part of their identity such people have a strong orientation towards learning in all aspects of life, expressing and constructing themselves and being aware of how and why they are learning

Surely one of the goals of a higher education is to enable learners to develop their identity as a learner and their sense of authoring their life



10 What does research tell us about LLL. It tells what we already believe from our own experiences of a lifetime of learning.

Often people do not know they have learnt something until they realise they can do something that they couldn't do before.

LLL - WHAT DOES RESEARCH TELL US?



Keri Facer

11 Kerri Facer and her team undertook a large scale ethnographic study of the way people learn in Bristol viewing the city as a large complex ecosystem of infinite possibilities for learning.

VIEWING THE CITY AS A VAST ECOSYSTEM FOR LEARNING

How does a city learn? How does it encourage and support the learning of its inhabitants?

Two year ethnographic study in the city of Bristol with organisers of adult learning, conveners of protests, leaders of elite city institutions, refugees, longstanding inhabitants, artists, medics, city farmers, older people's groups, parents, carers and social activists (amongst others)

WEAVING LEARNING ECOLOGIES IN THE CITY - XIUJUAN'S LIFEWIDE LEARNING

What have I learnt?	Where did my learning happen?	What resources did I use?	What were the main methods I used?
About the UK	At home	Computer and Internet	Online courses
English Language	At work		Website and online videos
Skills	In the library	Ipad and Iphone	Talking to people
Research and Learning Skills	In training/workshop rooms	TV	Attending events
Work Related Skills	In the yoga Studio	Books	Participating in Workshops
Food and Cooking	In museums	Magazines	Playing and making things
Driving	In parks	Newspapers	Practising and taking part in activities (driving)
Yoga	In shops	Training workshops, events	Spending time with Tom
Art	On the Streets	Resources in parks, museums	Learning journey notes and photos
	On the road	Others (advent calendar)	
	Other places		

12 Here is one example of what learning meant to a newly arrived citizen of Bristol. Participants were asked to keep a diary of what they were learning, where they were learning the resources and methods they used.

It illustrates very nicely how learning is both needs and interest driven, that it permeates every aspect of life.

Here we can see in action the idea of self-education, learning and

living woven together to form a meaningful life.

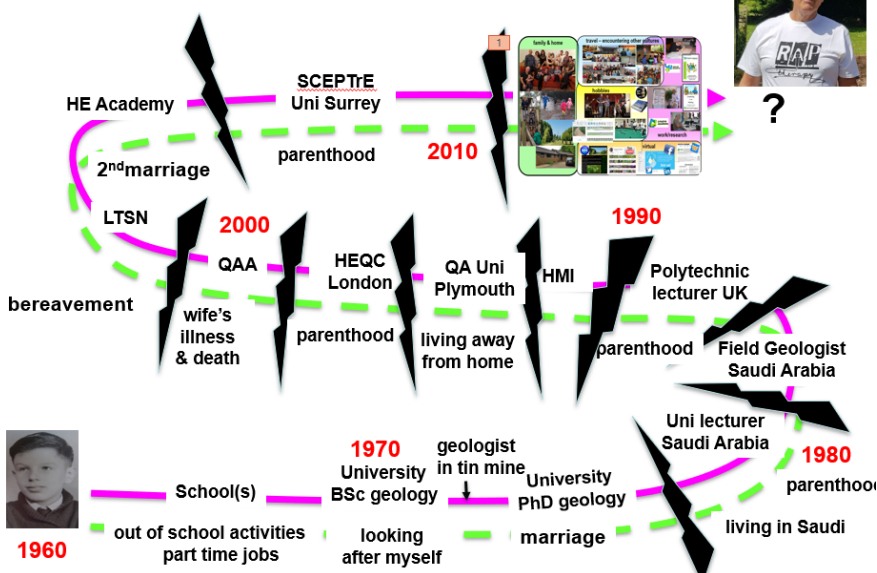
WEAVING LEARNING ECOLOGIES IN THE CITY



Within the overarching ecological metaphor, the idea of the cat's cradle draws attention to the individual [learning] trajectories of learners and how their learning ecologies overlap, interconnect and influence what is going on around them; one person's trajectory bends and pulls another's towards it or creates the conditions for others' trajectories to connect.

13 Kerri Facer used the metaphor of learning ecology for the way participants interacted with their environment and all the things in it and the metaphor of weaving their way through the ecosystem of possibilities connecting with the people, institutions, information and other resources in order to learn the things they needed to learn.

MY LIFELONG LEARNING TRAJECTORY



14 So this is the story of how I came to be here today. My unique learning and practice pathway through learning to be and being a geologist and a geology teacher a, to learning to be an inspector, researcher, policy maker, broker, consultant, teacher, developer and writer in the field of education and now running my own social enterprise.

2 different careers, many roles and major shifts in identity over 6 decades 17 years in formal education 43 years of informal on the job learning. Learning to be and being a parent, and learning relating to hobbies and interests, travel and many other aspects of life.

LLL - LEWIS LIFEWIDE PERSPECTIVES

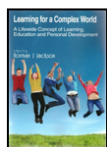
CREATING MEANING EVERY DAY: ACROSS THE WHOLE OF OUR LIVES



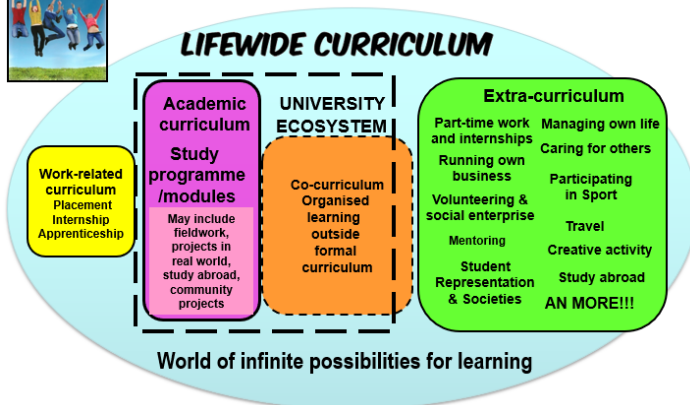
15 We are the only integrator of our learning and who we are is the integration of all we have been in the past and all we are now. This notion of the integrated self incorporating all our identities most obviously seen in the lifewide dimension of our life. These are the different domains in our life we inhabit and they provide the contexts and reasons for learning. This is the lifewide dimension of my life in the last few years.

I contend that it is this world, the whole of us and the whole of our lives that speaks to 'a strong inner self that is resilient, reflective, and able to see, develop and value positive connections and relationships [with the world]'. And therefore this should be the focus for a higher education that is preparing learners for long and uncertain learning lives.

EMBRACING THE LIFEWIDE DIMENSION OF LEARNING



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



learning, education and achievement.

16 How do we achieve this - we need to adopt a much more comprehensive and holistic view of learning, development and achievement and expand our concept of curriculum so that it encompasses the whole of a learner's life. And show them that we value learning, development and achievement by recognising and rewarding such learning. This was the project I was involved in for 3 years at the University of Surrey and it is described in the book Learning for a Complex World: A lifewide concept of

To engage with lifewide education a university needs to adopt a holistic view of learning, invest in new infrastructure to support and recognise such learning, and develop a culture where students can see that their efforts to learn and develop in spaces and situations outside the academic curriculum are valued.

EXAMPLE OF LEFWIDE LEARNING AT UNIVERSITY

Level 1 international student University of Surrey (2009)

BSc Study Programme : I am studying biosciences. I have classes for about 20h per week and learn through lectures, lab practicals, books/papers and discussions with friends

Friends: As an international student it is difficult to be away from my home & family. Friends, become a kind of family

Looking after myself
Domestic chores
Shopping

Entertainment
music, cinema,
meeting friends

University Tutoring and Mentoring
I work at a Combined Learning Centre for students with learning disabilities and/or behavioural problems. I worked one-on-one with three different students, one of whom had Aspergers Syndrome



Sport – uni netball team
Playing as a part of a team allows me to develop my inter-personal and communication skills, and always gives me a feeling of satisfaction. It lends a sense of unity and strength- when we put on our match uniforms, we know that we are no longer individuals, but part of something that is bigger than ourselves.

Organising & leading a group of student volunteers to work during the summer vacation in Uganda

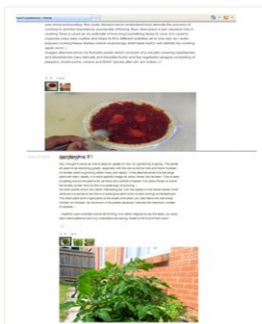
Volunteer - St John's Ambulance service
I joined St Johns' Ambulance, to learn first aid and general safety measures. I think this is an essential part of not just University life but life in general. Taking part in that course allowed me to feel more secure in my ability to deal with emergencies. As I hope to study Medicine as a Postgraduate degree, I found the course interesting and engaging.

transformation.

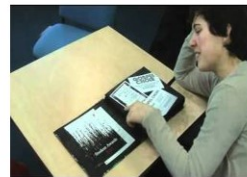
17 The first step in implementing a lifewide curriculum is to encourage learners to appreciate where, how when and why they are learning in all parts of their life. They also identify which aspects of themselves they would like to develop and identify where in their life they can see opportunities for development. Step three involves implementing their plan being sensitive to their learning and the contexts and situations they are learning in. They document this and create narratives that convey their

LIFE AS PEDAGOGY – IMPORTANCE OF NARRATIVE

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



SHOE BOX!
BLOG
SCRAPBOOK
E-PORTFOLIO
VIDEO DIARY
DIGITAL STORY
VIDEO FILM
SLIDE SHOW



PERSONAL
DEVELOPMENT
PLANNING

18 Creating and ecology to learn, develop and achieve something significant is identity work. The process of recording, reflecting on and narrating the experience and what was learned reveals the nature and extent of 'undergoing'. At Surrey we adopted the position that students could simply fill a shoe box with artefacts that represented their learning and development and as long

as they could communicate their journeys and the transformations that they made we would validate and recognise their learning and development through an award - Surrey Lifewide Learning Award. Students chose a variety of media but one of the favourites was a scap book. They wanted something material and physical to touch as they recounted their stories. In this way students were learning to develop a learning biography. The whole process could be conceptualised as a type of PDP (personal development planning) in which identity development is central.

WHAT SKILLS FOR A WORLD IN FORMATION?

WORLD ECONOMIC FORUM
Top skills required for non-routine cognitive work

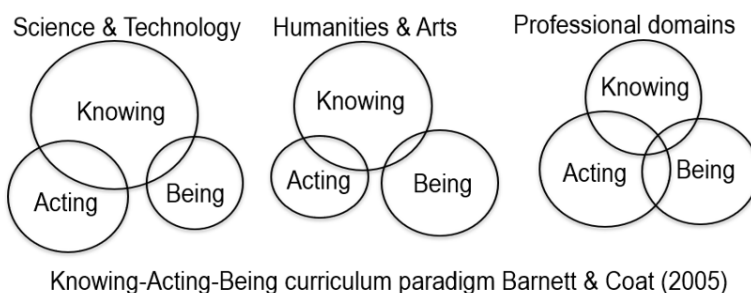
2015	2020	2040??
1 Complex problem solving	1 Complex problem solving	1
2 Coordinating with others	2 Critical thinking	2
3 People management	3 Creativity	3
4 Critical thinking	4 People management	4
5 Negotiation	5 Coordinating with others	5
6 Quality control	6 Emotional intelligence	6
7 Service orientation	7 Judgement and decision making	7
8 Judgement and decision making	8 Service orientation	8
9 Active listening	9 Negotiation	9
10 Creativity	10 Cognitive flexibility	10

19 Universities, employers and international agencies love a good skills list. One approach is to the problem of preparing learners for unknown and uncertain futures is to identify a set of skills that you think are important and create activities that enable students to develop and practice such skills. But as we can see from skills tables what is seen as very important changes over time. And surely the real skill in life is to integrate a whole bunch of skills in an effective manner in a particular context and situation.

LEARNING FOR AN UNKNOWN AND UNCERTAIN FUTURE



Under these conditions of uncertainty, the educational task is in principle, not an epistemological task; it is not one of knowledge or even knowing per se. It is not even one of action, of right and effective interventions in the world... Amid supercomplexity, the educational task is primarily an ontological task. (Ron Barnett 2004)



20 Twenty years ago Ron Barnett coined the term supercomplexity to describe the condition of the world and began an exploration into what a learner might need to deal with this world. He argued that it was fairly pointless filling up students heads with knowledge that had little relevance to the world of supercomplexity. Identifying a set of skills that would equip learners for uncertain futures was also a fairly futile act. Instead he

argued the pedagogical task is ontological - it is one of enabling learners to be and become the version of themselves they want to become. It's the project that drives our deepest motivations and is born of our ambitions for the future. **So rather than a knowledge or skill-based curriculum we need a curriculum that also engages deeply with the ontological dimension of being human.**

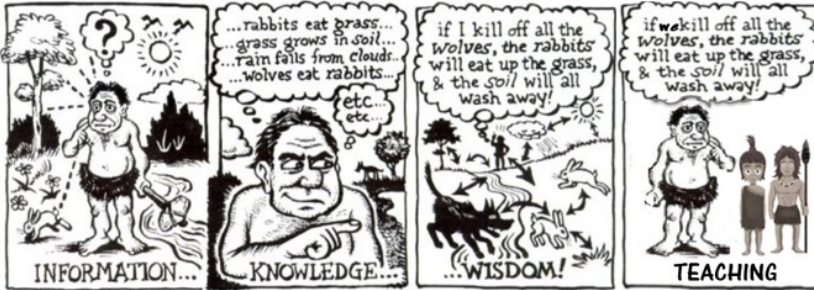
Source:

Ronald Barnett (2005) *Learning for an unknown future. Higher Education Research and Development* v23 #3

ECOLOGICAL THINKING FOR A WORLD IN FORMATION NECESSARY FOR NON ROUTINE COGNITIVE WORK

Learning through our experience
of interacting with our environment

Learning through
experiences of
interacting with others



PERCEPTION REASONING IMAGINATION INSIGHT COMMUNICATION

21 At the heart of our ontological project is our ability to transform information into knowledge and understanding. Through this process we are able to transform the world, our selves and others as we create new meaning.

This cartoon drawn nearly 40 years ago captures this fundamental process. It depicts our ancestor immersed in the contexts of

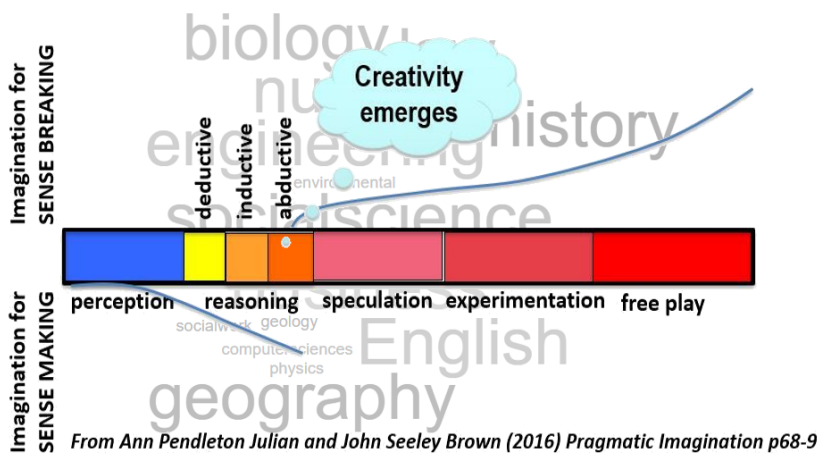
his dynamic uncertain and probably scary environment he uses all his senses to perceive the world around him and takes in information. Following the invention of language he is able to give names to things and recall their meaning. He begins to organize his observations into facts - or knowledge. After accumulating facts and observing relationships between these elements of knowledge he makes an imaginative leap and relates these ideas in a cause and effect way to create a mental image of the consequences of possible future actions. Through this process he changes his understanding of the way his world works - an act of personal creativity. Through this understanding he becomes a different person - he is able to mediate his behaviours to avoid the damage to his environment and his life he could cause. Using a term introduced by John Dewey 'he undergoes'. This notion of undergoing is an important idea for an ontological curriculum.

Having gained this insight he is able to pass on (teach) the new meaning he has created to his children in this way enhancing their learning not through their experience of encountering the world but through his experience of encountering the world.

Through this simple illustration we appreciate that lifelong learning involves both learning through the experience of encountering the world ourselves and learning through the experience of being taught about the world by others. This story goes to the heart of what it means to be creative and also illuminates how we *undergo* and become a different version of ourselves through our interactions with the world and our cognitive and emotional responses to our interactions.

ECOLOGICAL THINKING FOR LLL

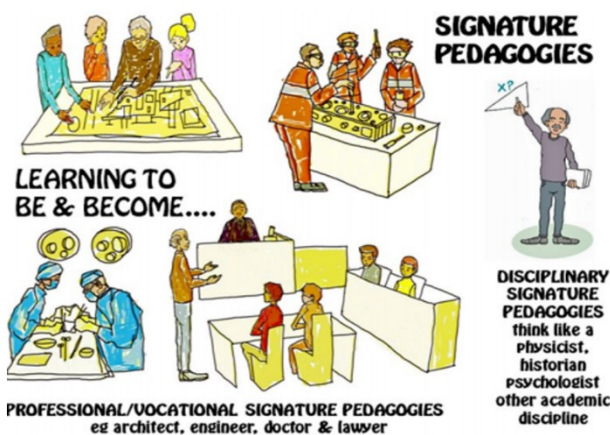
COGNITIVE APPRENTICESHIPS FOR NON-ROUTINE COGNITIVE ROLES



22 Now one thing that higher education is good at is enabling learners to develop complex thinking skills in different disciplinary contexts. We call it critical thinking but I prefer to view of it as ecological thinking whose form is illustrated this illustration of the cognitive continuum devised by Pendleton Julian and Brown.

The key meta-skill for surviving and flourishing in the world 40 years from now has to be our ability to think with sufficient complexity to be able to understand the situations and contexts and projects we are involved in. Such thinking is deeply ecological in the sense that it involves us being immersed in and being able to access and process the information flows from the environment of which we are a part. This diagram provides a neat way of summarizing the complex interplay between our perceptions as we access and try to make sense of the information flows.. How we reason to create knowledge from these flows of information. How we make use of our imagination to extend our understandings. Most importantly, it is in these mental processes that are stimulated through our interactions with our environment and the people and materials in it, that our creativity lies. Our creativity is going to be essential for survival and flourishing in the non-routine cognitive domain.

SIGNATURE PEDAGOGIES & SIGNATURE LEARNING EXPERIENCES



23 So the challenge becomes in what ways might we enable learners to develop their ability to think and act ecologically - or in ontological terms to be ecological and become more ecological.

What are the educational vehicles for such development? I believe they are the signature pedagogies of disciplines and fields of practice.

Signature pedagogies are the modes of teaching, used in the preparation of people for a particular profession such as law, medicine, engineering, teaching or being an architect or geologist. Signature learning experiences are the activities and situations learners engage in as a result of signature pedagogies.

Lee Shulman (2005) defines signature pedagogies as “the types of teaching that organize the fundamental ways in which future practitioners are educated for their new professions.” Professional education involving close to real world simulations, and on-the-job learning in professional workplace situations are the main contexts for these pedagogic practices. These types of pedagogies comprise a synthesis of three apprenticeships—a cognitive apprenticeship wherein one learns to think like a professional, a practical apprenticeship where one learns to perform like a professional, and a moral apprenticeship where one learns to think and act in a responsible, ethical and value-based manner that integrates across all three domains. A signature pedagogy has three dimensions: surface structure, deep structure, and an implicit structure. Surface structures consist of concrete, operational acts of teaching and learning, while deep structures reflect a set of assumptions about how best to impart a certain body of knowledge and know-how. The implicit structure includes a moral dimension that comprises a set of beliefs about professional attitudes, values, and dispositions.

Gurung et al (2009) and Chick et al (2012) argued that signature pedagogies are not unique to professional/ vocational education and training: academic disciplines also have distinctive habits of mind that are reflected in the pedagogic practices adopted by teachers in the discipline. These authors explore how 29 disciplinary and interdisciplinary fields foster deep learning and help students think like disciplinary experts. These “signature pedagogies” reflect the deep structures of the discipline and attempt to answer questions such as: “What does our pedagogy reveal, intentionally or otherwise, about the habits of head, hand, and heart as we purport to foster through our disciplines?”

Sources

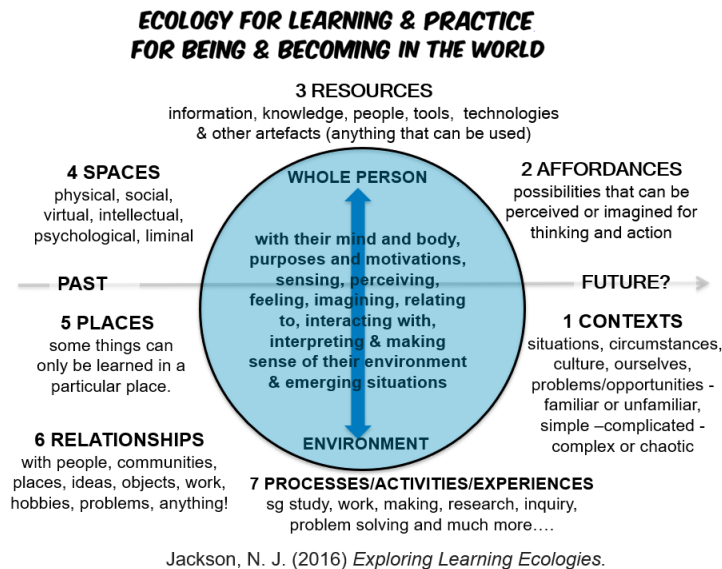
Shulman, L.S. (2005) *Signature pedagogies in the professions Daedalus*, Summer 2005, Vol. 134, No. 3, Pages: 52-59 Available at: <http://www.mitpressjournals.org/doi/pdf/10.1162/0011526054622015> Chick, N.L., Haynie, A., & Gurung, R. A.R. (Eds.)(2012). *Exploring more signature pedagogies: Approaches to teaching disciplinary habits of mind*. Sterling, VA: Stylus.
Gurung, R. A. R, Chick, N.L., & Haynie, A. (Eds.) (2009). *Exploring signature pedagogies: Approaches to teaching disciplinary habits of mind*.

A GEOLOGIST'S SIGNATURE LEARNING EXPERIENCES



24 We might illustrate how signature pedagogies and signature learning experiences work using the example of a learner who has embarked on the journey to becoming a geologist. A domain specific problem is the making of a geological map. To achieve this the novice geologist must not only have sufficient knowledge and skills to think and act like a geologist. They must learn to think and act in the field environment and tackle the problem using the same methodological approach as an experienced geologist would.

Through signature learning experiences constructed and facilitated by teachers through their signature pedagogical practices, novice learns how to conduct himself safely in the field, how to use the tools a geologist uses to make a geological map how to locate themselves in space and observe and record information and how to create a map that communicates the knowledge he has gained.



25 Looking at this process through an instructional model we would call this 'training'. But wearing an ecological mindset we might see this as coaching a novice so that he/she creates an ecology through which they can practice by interacting with their environment to access the information flows in order to learn and solve the domain specific problem of making a geological map.

Slide 25 synthesizes the concept of a learning ecology which is also the way that the geologist extends his mind and

body into his environment so that he becomes indivisible with his environment. It's the vehicle for his being and the vehicle for his becoming or undergoing.

Learning ecologies (Jackson 2013) 'the process(es) we create in a particular context for a particular purpose that provides us with opportunities, relationships and resources for learning, development and achievement'.

This definition represents the integration and interdependence of the elements of learning and achievement which include the contexts and spaces we inhabit, including our history, relationships and resources, (the most important being knowledge and tools to aid thinking), and our will and capability to create a learning process or learning ecology for a particular purpose.

Such actions may be directed explicitly to learning or mastering something but more likely they will be primarily concerned with performing a task, resolving an issue, solving a problem, or making the most of a new opportunity.

Learning ecologies have temporal dimensions as well as spatial and contextual dimensions: they have the capability to connect different spaces and contexts existing simultaneously across a person's life-course, as well as different spaces and contexts existing in different time periods throughout their life-course.

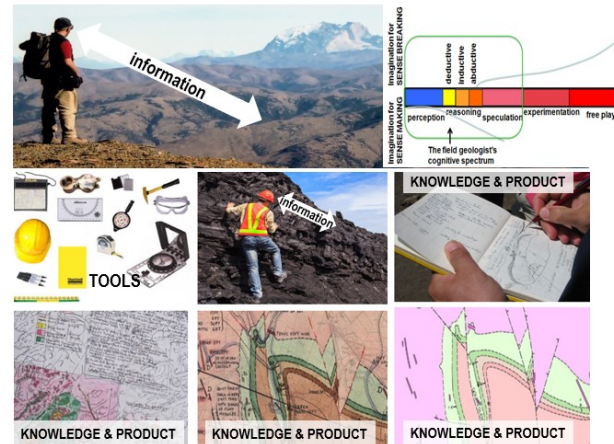
New meaning grows from the experiences and reflections on experience grown through our ecology when it is integrated with our previous understandings, values and beliefs. Our unfolding experiences contain things which are currently meaningful and also things that do not make sense to us. It is in striving to make sense or better sense of such things that new meaning grows in relation to all of the above. Its an ecological process.

Sources

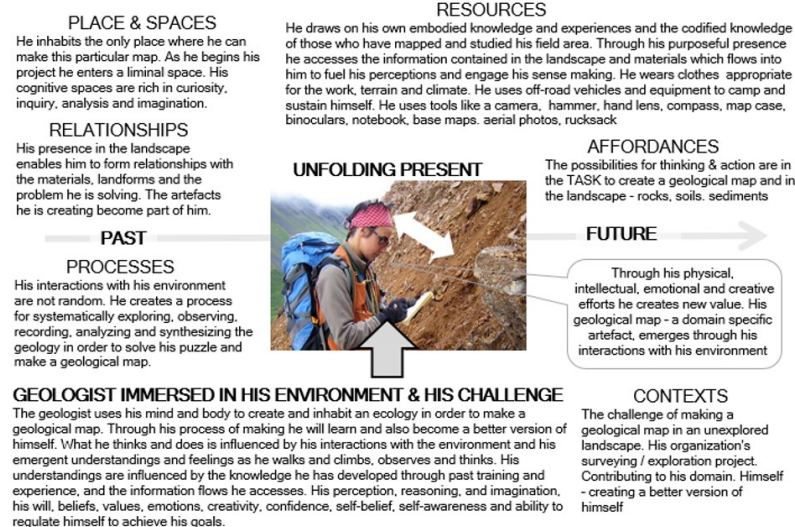
Jackson N J (2016) *Exploring Learning Ecologies* Lulu

26 The geologist enters his field area often knowing little about it. He has to extend his body and his mind into the environment to access the information flows that enable him to work with his problem. He uses a range of tools and patiently and accurately perceives and reasons to comprehend what he sees. He records his observations building a picture as he goes. His imagination helps him speculate and conceptualise his problem to help him understand and solve his problem. Each step determines where he will go next. His domain specific artefacts emerges through this process.

A GEOLOGIST'S ECOLOGY FOR LEARNING & PRACTICE



A GEOLOGIST'S ECOLOGY FOR LEARNING & PRACTICE

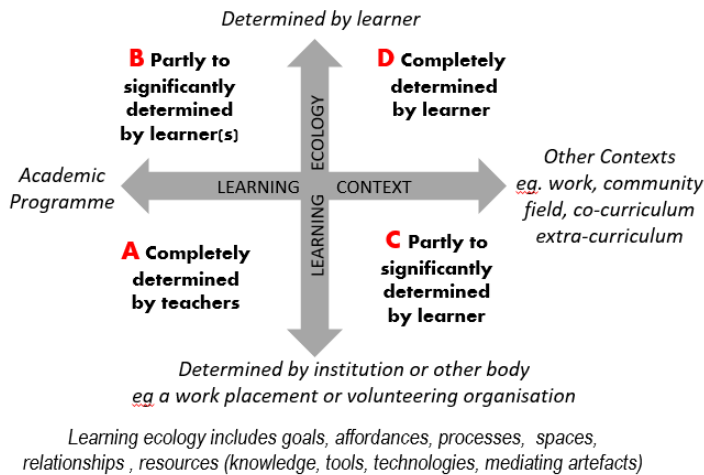


27 We can use the learning and practice ecology framework to reveal the process of how the geologist interacts with the environment to solve his geological problem and create his artefacts.

Source:

Jackson N J (2018) *Illustrating an ecology of practice: making a geological map*. *Creative Academic Magazine* p43-47 Available at: <http://www.creativeacademic.uk/magazine.html>

PEDAGOGICAL TASK - ENABLE LEARNERS TO CREATE THEIR OWN ECOLOGIES FOR LEARNING AND PRACTICE

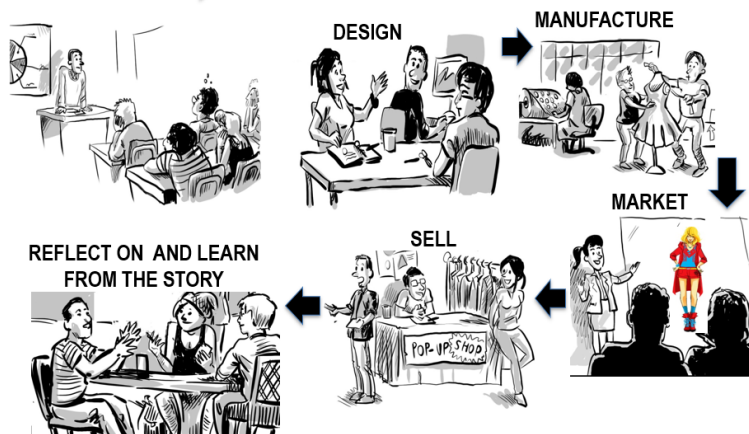


28 We used to talk about key transferable skills I believe the essential capability in any domain is to be able to create an implement an ecology for learning and practice. It is the means by which we extend our mind and body into the environment to understand the problem and access the information flows. It is through this process of relating and interacting that we learn and undergo (transform our understandings).

Regardless of the domain the most important pedagogical task is to enable learners to create their own ecologies for 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.

PEDAGOGICAL TASK - ENABLE LEARNERS TO CREATE THEIR OWN ECOLOGIES FOR LEARNING AND PRACTICE

FROM THIS TO → A COLLABORATIVE CREATIVE LEARNING ECOLOGY



29 It's possible to create experiences through which learners can create, to a greater extent, their own ecologies through a signature learning experiences.

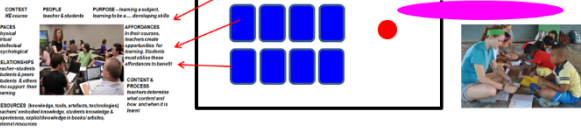
Here is an example of how two lecturers teaching lecture-based modules in manufacturing and retailing in a school of fashion, combined the modules into a single unit that ran across 2 semesters and created, with some

seed funding, an active learning process that simulated a scenario in the fashion industry. 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.

LEARNING ECOLOGIES - THE STUDENTS' PERSPECTIVE

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

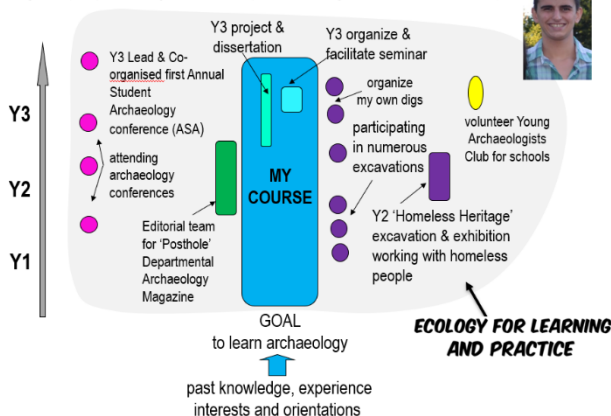
Most are created by teachers & institution some by students, and some by organisations outside the university



30 So what does an ontological curriculum look like from a student's perspective? They may see their course as the dominant feature of their life while at university but they will also see other spaces as an integral part of their life. Their course is full of modules many of which they have no control over what they are learning, why they are learning it or how they are learning. These ecologies for learning are controlled by teachers. There are however likely to be spaces where they can exert a fair amount of control over the what, the how,

the why and the when of learning - for example an independent project. These are the academic curriculum spaces in which they can create their own ecologies for learning. Outside the academic curriculum they may find or create other spaces in which they can be and become the person they want to be.

AN ONTOLOGICAL CURRICULUM BEING & BECOMING THE ARCHAEOLOGIST I WANT TO BE



31 Example of how students create their own ontological curriculum. If left to their own devices, proactive students will construct their own ontological curriculum.

Students' interests, needs and ambitions are not limited by their course or the pedagogical practices they are subjected to. An engaged, proactive student will seek out opportunities in their whole environment, especially when developmental opportunities within their course are limited. The abstract idea of an

ecology for learning is brought to life when learners share their narratives of their own experiences of learning in becoming the sort of persons they want to be. Here, an archaeology student in his final year describes his attempts to become the archaeologist he wanted to be, which took him outside the limitations of his university ecosystem (abbreviated from Jackson 2016, pp. 93-98).

[In going to university] I wanted to become an archaeologist and that ambition caused me to get involved in many things outside my course that I thought would help me become an archaeologist. The most obvious process I engaged with to learn archaeology was the timetabled and structured course. This involved the reading of set course material much of it accessed through on-line journals and participation in lectures. This structure that was designed and taught by my teachers allowed me to follow a very clear process of learning, helping me to fully understand what information I had to know within the course. My degree course formed the backbone to my learning about archaeology. It

provided me with contacts with people who were also interested in my subject and enabled me to develop a mind-set that encouraged me to engage with archaeology in many different ways.

The one experience in my course where I feel I had to create my own learning process was my final year dissertation which required me to create a project around something I found interesting and challenging. I had taken a module in my second year which involved a technique called ZooMS for analysing collagen in animal bones to identify animal genus. The academic responsible for developing the technique wanted someone to try the technique on erasure rubbings from bones. I thought this was interesting so I wrote my proposal and created a process that involved me sourcing samples, experimenting using different rubbing and collagen extraction techniques, analysing the collagen using a Mass Spectrometer, then processing the data and writing up the results. Although the process for achieving my goal was not particularly smooth it was one that I had largely created based on my past experiences of academic research gained throughout my three years at university. A lot of different people helped me including my supervisor, laboratory technician, two of my peers who were involved in similar work, a museum curator, and a PhD student within the department. I drew on a range of resources and facilities including collections of ancient animal bones, specialist laboratory, processing software, and articles. The research process was not straightforward and I was forced to modify my process as I realised that certain methods did not give me the results I was hoping for.

Being an archaeologist involves 'digging' to expose artefacts through which we can interpret the past. Unfortunately, my course only provided a four-week introductory fieldwork course so I joined a number of 'digs', six in total run by two different PhD students, a member of the academic staff, a commercial company, and an external public organisation. I probably spent over three months on excavations which gave me valuable insights into how to organise and conduct a dig, how to conduct various types of surveys, how to prepare, identify and display artefacts and beyond this how to work as a member of a team. The commercial digs I undertook introduced me to the world of commercial archaeology and the different approaches and mindsets that are used in the commercial world.

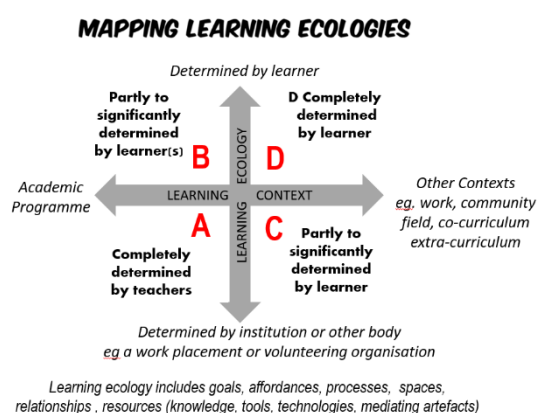
One of these [digs] had a particular significance for me. Homeless Heritage is dedicated to working with homeless communities in order to understand and value the spaces used by such communities using archaeological methods. It involved [me] working with homeless people in order to understand the relevance of what [was] found. In this way I was able to form friendships with people I would never have come into contact with in my student life. I began to appreciate the problems of homeless people and to see the world through their eyes.

Looking back over my higher education experience I can now see that my course provided me with the basic knowledge I needed but that my attempts to learn archaeology and become an archaeologist involved much more than turning up for lectures and studying the reading list. I believe that the choices I made in getting involved in these wider experiences personalised my experience and the learning I gained from it and helped me become the archaeologist I wanted to be.

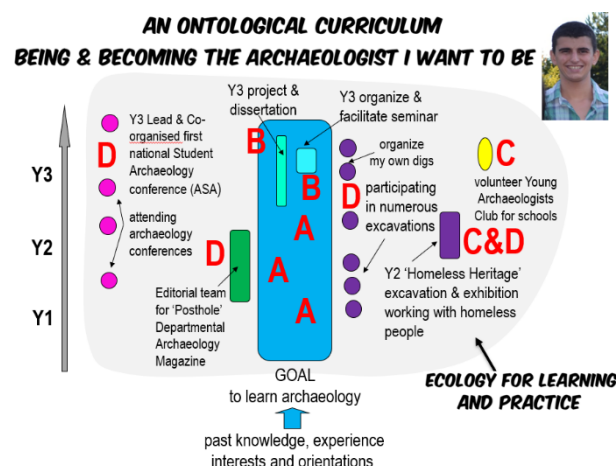
Michael's narrative demonstrates how the idea of learning ecologies can be applied to undergraduate higher education. It shows that his process of learning, being and becoming was not confined to an academic programme. Rather we see how his motivation to become the sort of archaeologist he wanted to be and his desire to create new meaning, form the central purpose around which he forms his personal learning ecologies to develop himself beyond the opportunities his course offered. His goal - to learn archaeology and gain a good

degree - sustained his motivation over the three years he was studying, but it was the particular projects he embarked on that gave him the opportunities to become the sort of archaeologist he wanted to be. He found opportunities to be and become an archaeologist in different contexts which grew from the circumstances of his life and the relationships he had formed. Through his narrative, we see him involved in the ecologies for learning created by the teachers in his department and he describes an experience where he was essentially responsible for designing and implementing his own ecology for learning (his final year research project). We also see several examples of experiences outside the institutional environment where he participated in the learning and practice ecologies of others (archaeological digs) some of which had a significant impact on him. Through a combination of his course experiences and his own efforts, he participated in and created experiences for learning, personal development and achievement in all four of the conceptual spaces shown in figure 30 In this way, he optimised his own education for the future world he intended to inhabit and transformed himself in the process.

32



33



Source:

Jackson N J (2016) *Exploring Learning Ecologies* Lulu

Some conclusions

I accept that there are many ways to help students develop themselves so that they are more likely to sustain themselves through long, complex and challenging learning lives. I believe this challenge has come of age as we progress into the century and realise just what a formidable challenge the future is going to be. If the moral purpose of education is to make a difference to students' lives then part of that responsibility should be focused on their long term future.

We have an opportunity to do more and the first step is always to do exactly what you are doing - pose the question and explore it in all its manifestations.

I believe we need to ground our educational thinking and action in Eduard Lindeman's wise words - 'the whole of life is learning therefor education can have no endings'. Consequently,

we need to embrace the whole of a students' life when we are considering their development as a person for their future world. We need an educational approach that values their attempts to construct their identity as a learner in all its manifestations and to encourage and value development of qualities like the willingness to get involved, to do stuff to try, persistence and determination and resilience in the face of setbacks. I believe such qualities, which we used to call character, are developed across the whole of a learner's life and that leads me to conclude that we need to adopt a lifewide concept of learning, development, achievement and education.

As my talk showed I also believe that we need to develop a deeper appreciation of how learning, practice and creativity are ecological phenomenon brought about through our relationships and interactions with our environment. I argue that the key to survival and flourishing in any domain is being able to create and sustain an ecology for learning and practice. If my argument is accepted then the pedagogical challenge is to design learning programmes so that students gain the experience of creating and implementing their own ecologies for learning.

Ghandi argued ontologically that we have to be [become] the change we want to see in the world. But there is another ontological dimension to this challenge, we are also often required to be the changes the world requires of us. And that is the challenge that confronts us as a human being and it is also at the heart of the idea of an ontological curriculum for higher education.



**A thousand tiny universities –
Barbara Grant**

"How can we [be] alert to the daily possibilities for transformation towards our imagined future university. I propose the idea of a thousand tiny universities as one that offers a ... basis for continually proposing and enacting in the present the kind of university we cherish." *Philosophy and Theory in HE* (2019)

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

34 FINAL THOUGHTS:

I would like to connect Ghandi's inspiring vision for humanity that we have to be [become] the change we want to see in the world, to another inspiring idea proposed by Barbara Grant - that we can all be our own university if we want to be.

We are all able to contribute to shaping the sort of education we believe is right for the development of our students - now in the present but also mindful of

Perhaps the place to start is for each of us to develop our own manifesto setting out the type of learning experiences we want to enable in order to make an enduring difference to the lives of our learners.

You can find my manifesto, together with slides and notes at:

www.normanjackson.co.uk/ntu.html

HOW MIGHT YOU BEGIN TO DEVELOP A PERSONAL MANIFESTO?

These prompts might help

- 1 In the context of your own life, what does lifelong learning mean to you?
- 2 When you were growing up, what were the most significant educational or non-educational experiences that prepared you for the lifetime of learning that you have experienced?
- 3 Based on your experience as a lifelong learner, what are the values, qualities, attitudes and capabilities needed to be an effective lifelong learner?
- 4 To what extent do you think higher education today, develops the values, qualities, attitudes and capabilities needed to be an effective lifelong learner?
- 5 What are the most important things higher education can do to prepare students for a lifetime of learning?
- 6 What are the most important things you can do as a teacher to enable students to develop themselves for a lifetime of learning?