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Comparative and International Education Society (CIES)

Webinar presentation 17th November 2020

Video: https://ciesesdsig.wixsite.com/esesig/workshops

Positive dis-illusion and everyday consciousness – breaking through to regenerative education in ten propositions

Abstract

> *'The shape of the global future rests with the reflexivity of human consciousness – the capacity to think critically about why we think what we do – and then to think and act differently'*.
>
> - (Paul Raskin 2008)

The fate of the planet and of humanity hangs in the balance. Yet there is an astonishing disconnect between pressing signs of global change, and the relatively closed world of education. At the same time, the epistemological ghosts of reductionism, objectivism, dualism, materialism, individualism, anthropocentrism, and technocentrism stalk mainstream education - impeding our ability to perceive and respond deeply, fully and wisely to the global predicament. This presentation will put forward ten propositions that seek to facilitate breakthrough to a more holistic and ecological state of being and mind that can engender educational thinking and practice that is fit for our times.

Outline of presentation - the ten propositions

Educators are invited to consider how far they agree with and recognise the following:

THE GLOBAL CHALLENGE

1. We do not *see and read* the world as we should – and as we now must.

2. *Transformative action* is required across most areas of human activity to ensure a survivable liveable future by 2050.

THE EDUCATION PROBLEMATIC

3. Mainstream education is (largely) is *maladapted* to our times.

4. Achieving sufficient *response-ability* in education policy and practice (EPP) poses a substantial and reciprocal learning challenge – both to the educational community (leadership, research and teaching), and to the student community.

5. Re-thinking dominant EPP requires examining the *paradigmatic foundations* arising from our cultural roots.

6. EPP - influenced heavily by marketisation, instrumental values, and neo-liberal purposes - has led to a damaging *three-dimensional squeeze*: on Purpose, Breadth, and Depth.

RETHINKING AND REGENERATION

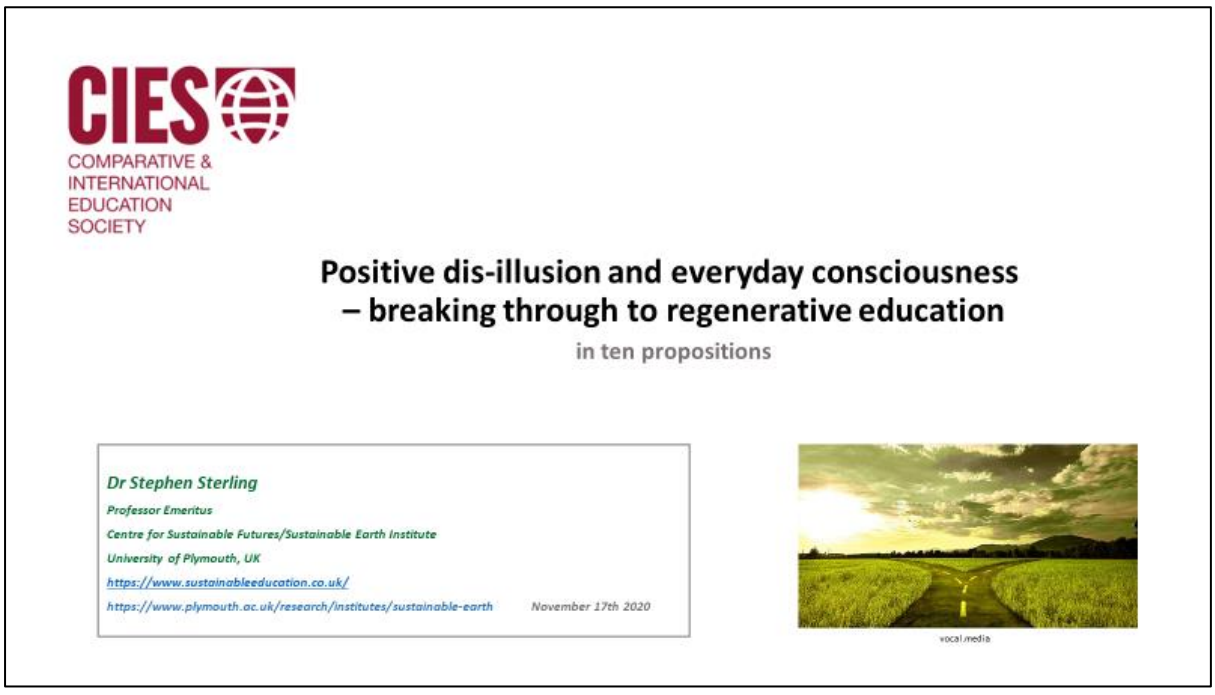
7. Deep social learning is catalysed by *positive dis-illusion.*

8. The systemic nature of reality (ecosphere + technosphere) – evidenced by mounting and interlocking crises - is giving rise to a revolution of worldview based on *participative consciousness*.

9. It is now time to fully embrace a *higher purpose* for higher education.

10. A rapid upsurge of *regenerative education* (through rethinking *paradigm* → *purpose* → *policy* → *practice*) is imperative - and arising!

TALK BEGINS HERE



Part One

INTRODUCTION

Welcome… I'm Stephen Sterling and I'd like to thank CIES and the Center for Sustainable Futures at Columbia University for kindly inviting me to give this talk. This is based on a longer presentation which I have edited down to a shorter format for today. There are a lot ideas here, so you might want to go back over the slides at another time, and I will also make available the script of the longer talk which has more explanation, if you wish.

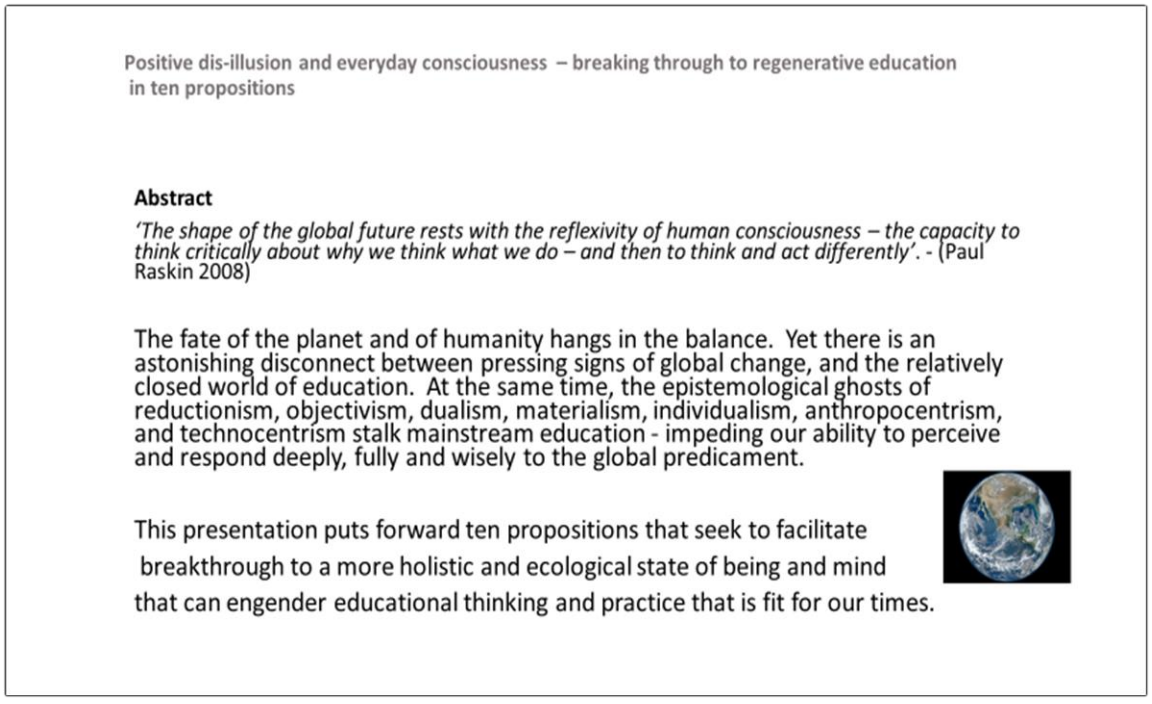
So to start: the first eight slides are by way of an **Introduction**, beginning with an **abstract**.

SLIDE 2

The quote from Paul Raskin - who leads the Global Transition Initiative - is one that I use quite often, because it summarises in one line the task before, us – particularly us educators.

The paragraph below mentions the disconnect between the pressing signs of global change and the relatively closed world of education.

So, as it states, in this talk I present ten propositions for your consideration which I think could help lead us towards necessary change in educational purpose, policy and practice.



Its not just me making the argument for change in education. UNESCO, no less, considered education in relation to planetary sustainability in their Global Education Monitoring report of 2016.

SLIDE 3

So as it states, 'education has the potential to transform the planet, but first we must transform our educational systems'. And this is reflected in the current UNESCO 'Futures of Education' consultation.

How should, how can, education respond to a pandemic world, the climate and ecological crisis, planetary boundaries, and the Anthropocene age? Because its response to the real world, or lack of it, has been my concern for very many years.

I've shaped my talk around ten propositions or assertions - each of which I will attempt to explain and defend. These are meant as stimuli – you are invited to think how far you agree or disagree with each of them and why.

SLIDE 4

The ten propositions

A) THE GLOBAL CHALLENGE

- We do not *see and read* the world as we should – and as we now must.
- *Transformative action* is required across most areas of human activity to ensure a survivable and liveable future by 2050.

B) THE EDUCATION PROBLEMATIC

- Mainstream education is (largely) is *maladapted* to our times.
- Achieving sufficient *response-ability* in education policy and practice (EPP) poses a substantial and reciprocal learning challenge – both to the educational community (leadership, research and teaching), and to the student community.
- Re-thinking dominant EPP requires examining the *paradigmatic foundations* arising from our cultural roots.
- EPP - influenced heavily by marketisation, instrumental values, and neo-liberal purposes - has led to a damaging *three-dimensional squeeze*: on Purpose, Breadth, and Depth.

C) RETHINKING AND REGENERATION

- Deep social learning is catalysed by *positive dis-illusion.*
- The systemic nature of reality (ecosphere + technosphere) – evidenced by mounting and interlocking crises - is giving rise to a revolution of worldview based on *participative consciousness*.
- It is now time to fully embrace a *higher purpose* for higher education.
- A rapid upsurge of *regenerative education* (through rethinking

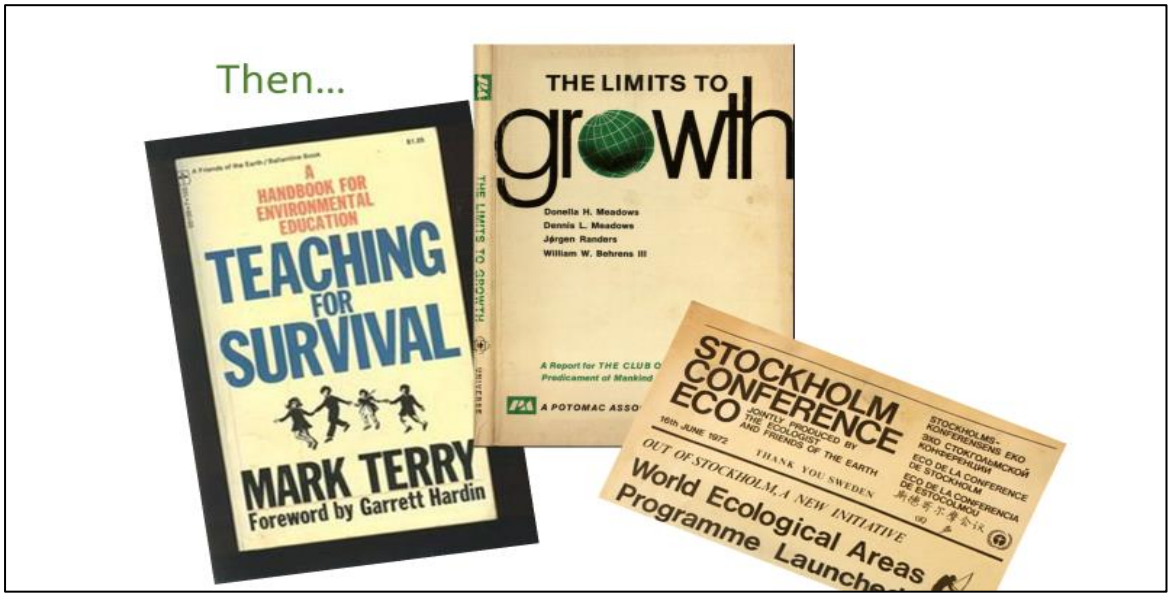
  paradigm → purpose → policy → practice)

  is imperative - and arising!

Professor Stephen Sterling University of Plymouth

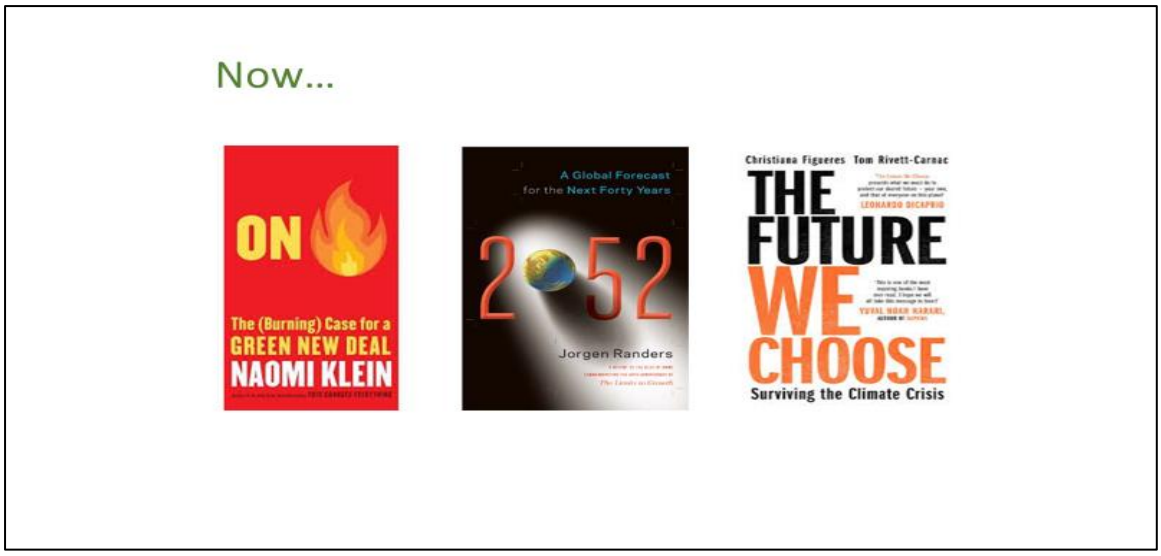
I've been working in environmental and sustainability education for more than 40 years...inspired originally by the wave of environmentalism of the early seventies. This was then…

SLIDE 5



And this is now….

SLIDE 6

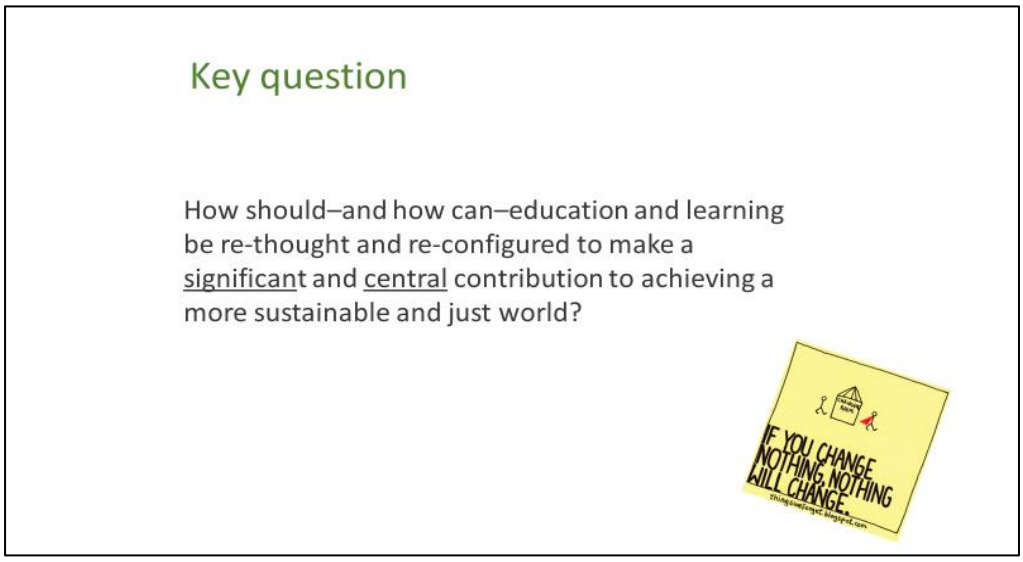


…….a whole slew of books and reports are coming out underlining that a) we are in trouble, and b) that change towards a safe future is possible if we choose to embrace radical change.

The calls for change in our human trajectory, ever present throughout the fifty years, have become much more insistent and urgent, and particularly in the last short while.

In all that time, and fired by these issues, I've been tussling with a fundamental question, which can be summarised as follows:

SLIDE 7



How should – and how can – education and learning be re-thought and re-configured to make a significant and central contribution to achieving a more sustainable and just world?

Because, despite undoubted pockets of innovation and excellent work, the mainstream is not on board. The mismatch between Westernised formal education systems on one hand, and on the

other, the dynamic learning response necessary to address the “watershed moment” that defines our troubled times, is becoming starkly apparent.

Many educators would answer my question by simply *integrating* or ‘embedding’ some sustainability concepts into their teaching and pedagogy. But this is a strategy of *accommodation*, which leaves most policy and practice unchanged.

The urgency of our global situation at this point of the human journey demands a much deeper and more radical response.

If I unpack and restate my own question, it comes out something like this:

> *What is the nature of the change of consciousness that appears necessary to the achievement of a safe, more ecologically sustainable and liveable society –which can both survive and thrive?*
>
> *What changes may be required in the way we view and practice education and learning if they are to contribute fundamentally to such a change of consciousness?*

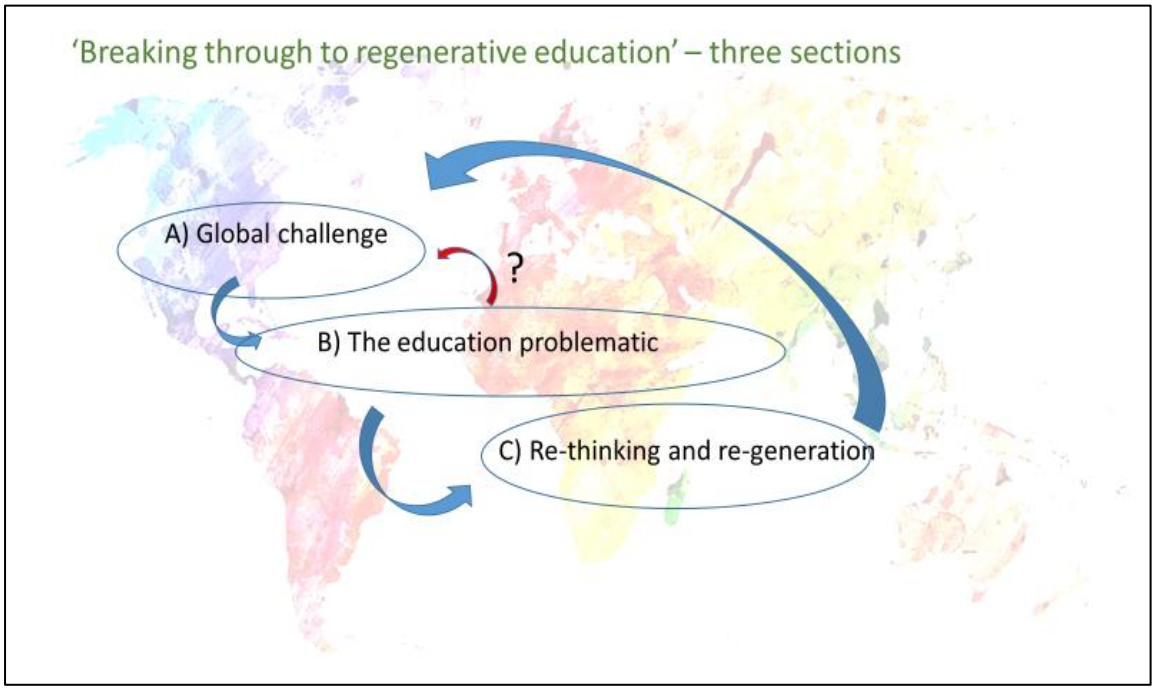
What I find baffling is that these kind of questions have been extremely rare in educational discourse.

How many invitations to conferences and seminars have you received that make no reference at all to broader contexts, to global trajectories, to the kinds of futures that graduates will enter and need to manage within?

There is a long-held assumption in educational policy and practice that the future is stable and given. So education tends to sit within its own bubble, with little recognition of the huge contextual crises that define our times, and the radical discontinuities that are facing us (evidenced currently by the pandemic).

The rest of the talk is in three parts, A,B and C, as shown on this slide.

SLIDE 8

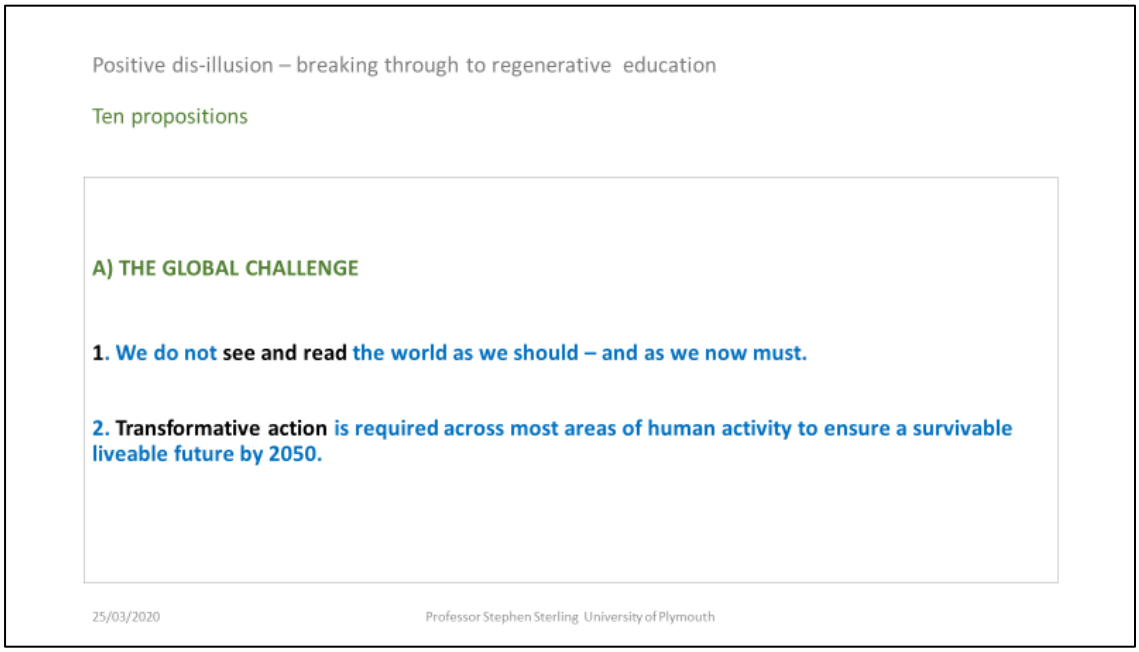


First, a section on how we view the world under the title the 'Global Challenge';

- second is the 'Education Problematic' which seeks to throw light on why its response to the challenge (as shown by the red arrow) is inadequate; (you may recall years ago David Orr arguing that education often exacerbated rather than addressed the issues).

- and the third section which is about 'Re-thinking and regenerating education' - so that it can play a central and decisive role in the changes we now need to manifest. So the large blue arrow represents a positive role in directly addressing the Global Challenges – which are the theme of the first section. This section A has two propositions as follows (DON'T READ):

SLIDE 9



So, starting at proposition 1

SLIDE 10

A) THE GLOBAL CHALLENGE

To understand the inadequate response, we need to think of education as a subsystem of culture and society and start there. So my first proposition concerns worldview and is:

11. We do not see and read the world as we should – and as we now must

We are now witnessing alarming and unprecedented phenomena and trajectories across many areas and sectors globally (of which the Corona pandemic is one very evident manifestation).

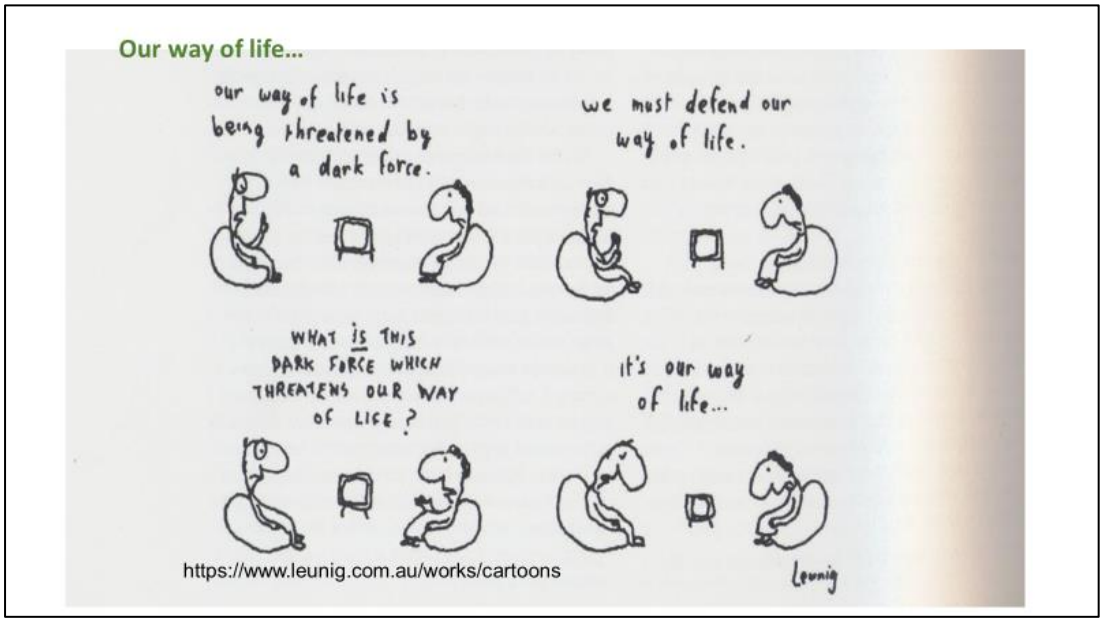
I argue that the primary root (and the perpetuation) of these systemic crises lies in the way the Western and Westernised mind perceives, thinks, and values;

- that external dysfunctions are essentially a manifestation of a shared internal dysfunction of worldview.

The problems whilst real enough, they are *primarily* **not** 'out there'. Rather, they are 'in here', rooted in, arising from, and often perpetuated by the underlying beliefs and worldview of the Western mind (Laszlo 1989). (ref)

The circularity of the internal and external dynamics is beautifully illustrated by this cartoon by Leuning.

SLIDE 11



The anthropologist Gregory Bateson contended nearly 50 years ago

- that threats to people and ecological systems arise from 'errors in our habits of thought at deep and partly unconscious level' (p. 463).
- that our everyday operational consciousness, is 'narrowed down', that we operate from what he called an '*epistemological error'* which in the end will surely hurt us (Bateson 1972, 461).

Which I think was a prescient insight.

So he argued for a much more holistic and ecological way of seeing, of knowing and doing in the world.

Earlier still, Lewis Mumford (1964, 393) made an extraordinary assertion that:

> All thinking worthy of the name now must be ecological.

Now, with the Earth 'on fire' as Naomi Klein's recent book asserts, and signs of socio-economic and ecological breakdown and destabilisation becoming increasingly evident, the customary narrowness of our attention is no longer tenable:

We are being forced to look both *inwards*; 'do our values, beliefs and accustomed ways of doing still hold?' and *outwards*; 'what is the larger context here?' and to look at the relationship between the two.

To put it simply: at this very juncture of history we need to engage in an historic cultural and economic *volte-face.* For many years, our narrow *system of concern* has been manifested

at individual and societal levels in individualism, egocentrism and anthropocentrism,

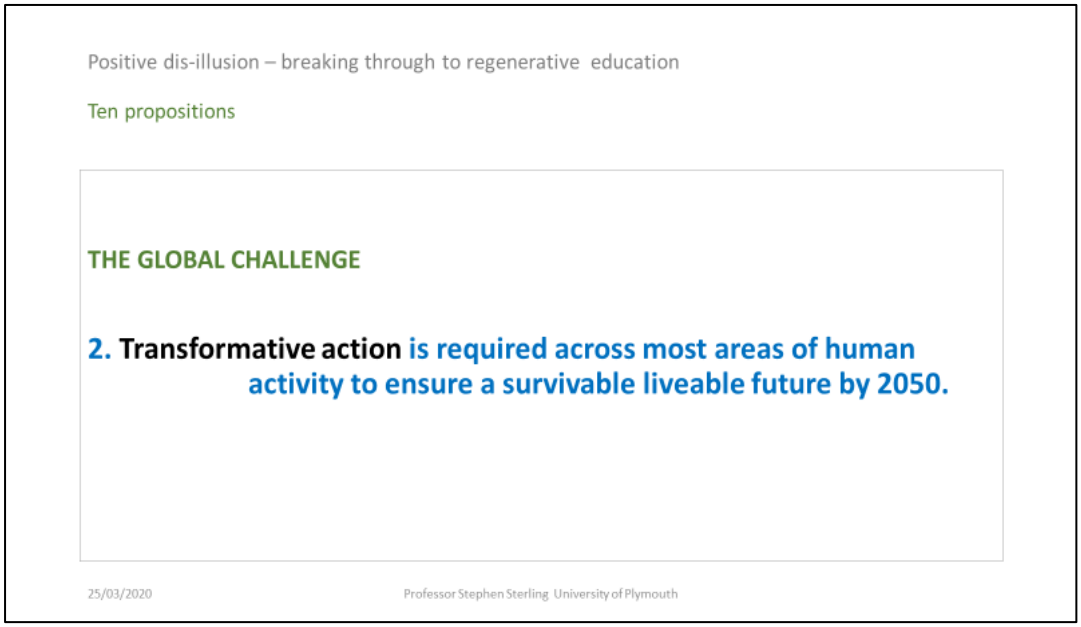
- whilst our *sphere of influence* and impact in the material world has been endlessly expansive.

Instead, all the warning signs - and studies on Planetary Boundaries - suggest we urgently need to nurture an extended, inclusive, and holistic view of the world, whilst reducing and localising our physical and ecological impact, in order to be able to halt the damage and generate resilient natural and human systems into the future.

This is a profound reversal of *worldview* and *human impact*: put very simply - from a state of 'Little Worldview/Big impact' (the current state) towards a condition of 'Big Worldview/Little Impact' (the necessary state).

OK, second proposition:

SLIDE 12



12. Transformative action is required across most areas of human activity to ensure a survivable and liveable future by 2050

We know the future is profoundly uncertain. An emerging view is gaining ground amongst scientists, historians, and some politicians - that collapse of some sort is increasingly likely in future decades; ecological, economic, technological, social, or some combination.

Some economists are predicting that biophysical limits will inevitably usher in a post-growth world characterized by relocalisation, profound hazards and discontinuities for both human and natural systems (Crownshaw et al 2018,1) (5)

In response, there's a new *transformative zeitgeist* arising - not least driven by young people - and it's based on the twin drivers of profound concern and fierce hope. This heightened awareness is giving rise to some urgent re-thinking, realignment and refocussing in key areas of human activity.

We are witnessing a questioning of assumptions, and a search for new ways of doing things across many areas: for example, economics; agriculture and food production; rewilding and the restoration of nature; ecological design, energy, transport etc.

It is still on the margins of the mainstream, but the voice of such radical questioning is insistent, growing, and making inroads.

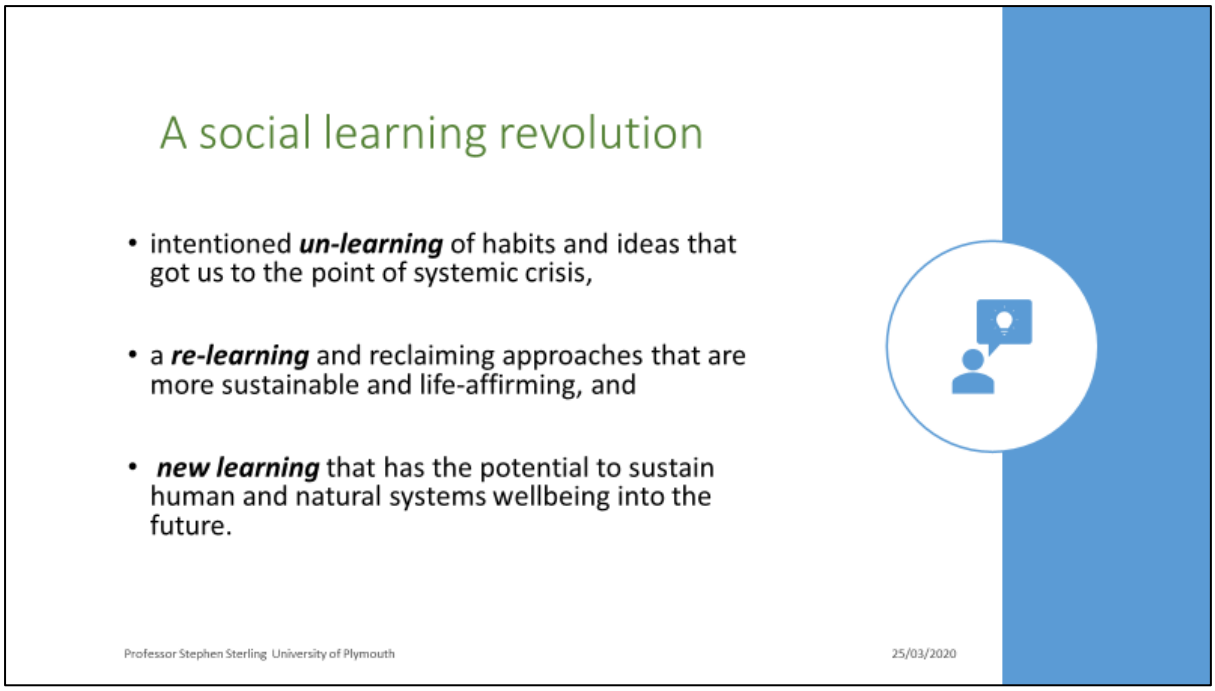
But there is evidence that the mainstream is picking up on this shift too. For example, a 2019 OECD report advocates 'Refocusing policies through a well-being lens' in the context of accelerating climate action.

There is an urgent sense of the need for *re-invention* in progress - which can be characterised as having three aspects:

i) *critique*: recognition that 'business as usual' is no longer tenable
ii) *vision*: the development of practicable alternatives that promise positive synergies
iii) *design*: implementing integrative ways forward that are sustainable long term.

Importantly, this shift can be seen as a learning process – a social learning revolution no less - which has three key aspects:

SLIDE 13

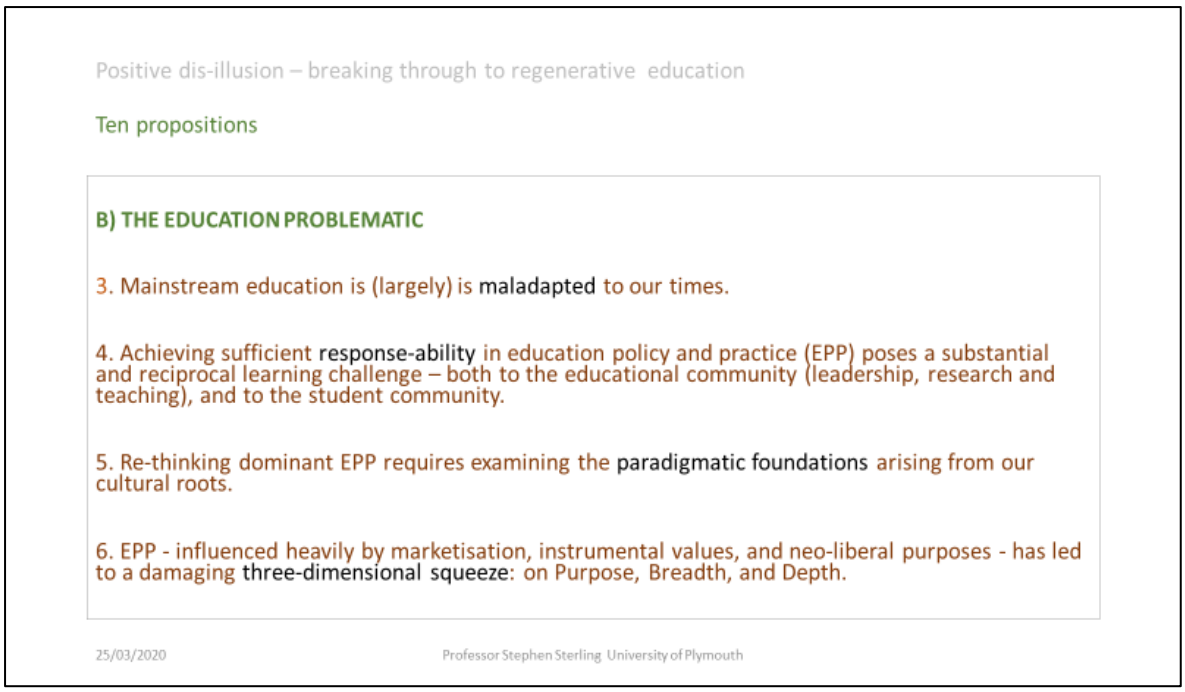


- an awareness and intentioned *un-learning* of habits and ideas that got us to the point of systemic crisis,
- a *re-learning* and reclaiming of approaches that are more sustainable and life-affirming, and
- *new learning* that has the potential to sustain human and natural systems wellbeing into the future.

Ironically enough however, the education sector – which purports to prepare people for the future- has not, by and large, been affected by the emerging transformative zeitgeist.

Which brings me to the next section of this talk - 'The Education Problematic' and the next four propositions, which are shown in the next slide:

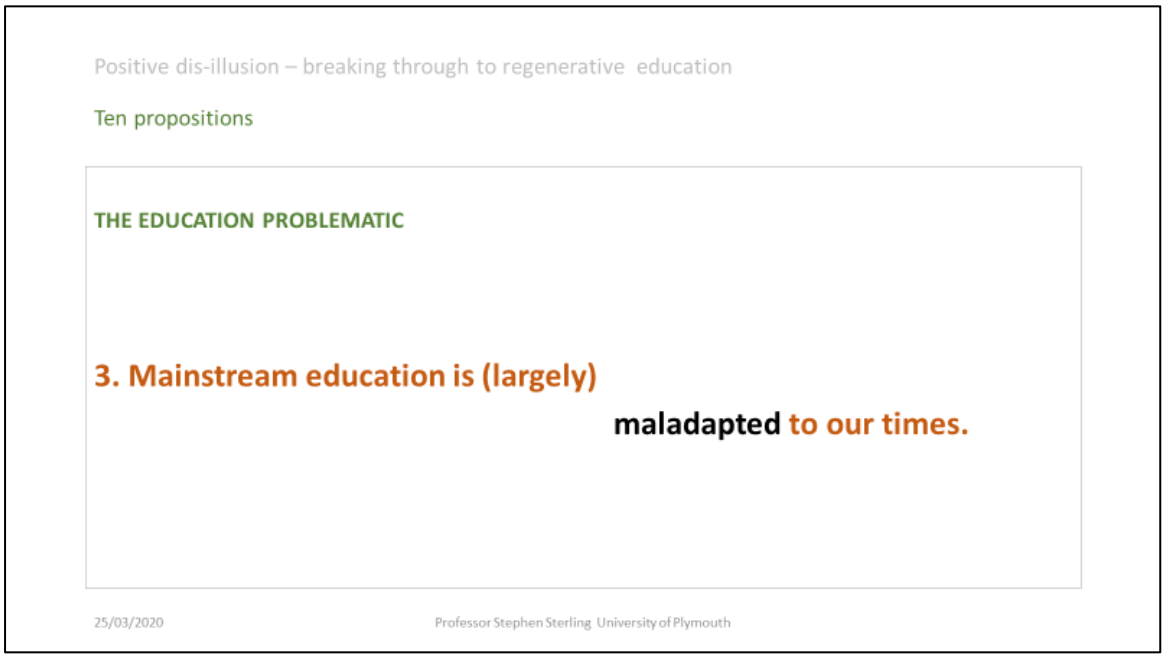
SLIDE 14 (This shows all section headings under Part B)



B) THE EDUCATION PROBLEMATIC

So taking the third proposition first….

SLIDE 15

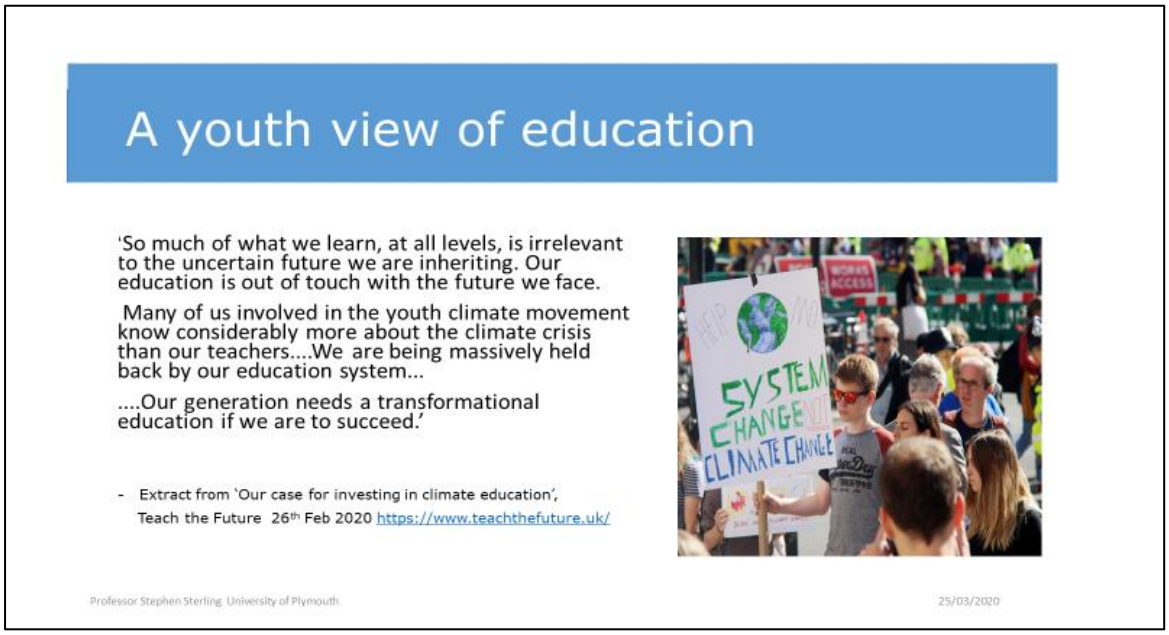


13. Mainstream education is (largely) maladapted to our times

In February 2020, a student organisation presented a draft English Climate Emergency Education Bill to Members of Parliament - the first ever education legislation to be written by pupils and students.

This slide shows part of the youth statement that accompanied this initiative: (*Read first two lines*)

SLIDE 16



The UK National Union of Students (NUS) has been conducting research for more than eight years on student attitudes to sustainability. Consistently, the overwhelming majority of respondents agree that universities and colleges should actively incorporate and promote sustainability education.

This pressure from below will mount, because education as it is currently constituted and enacted is more of a barrier to transformative action than a facilitative agent.

But perhaps we should not be too surprised. At a deep level, the prevailing educational paradigm reflects and is informed by the wider social paradigm or worldview.

So if the latter is maladaptive to contemporary global conditions, it follows that the prevailing educational paradigm will echo this orientation.

The key here is what I call the '*response-ability*' of education, that is, the ability or otherwise of education systems to respond fully and effectively to the profound challenges facing us.

It is poor response-ability in higher education that many students are forcefully pointing out.

And it is not just students. A private email I received recently from a senior member of UNESCO staff stated:

> 'I am asking myself more and more how to bring across the dramatic urgency to act, where all of us and those we talk to are so used to the long timeframe that is normally needed for education systems to change… But climate action needs to happen now.'

Rather than 'education for sustainable development' it is very likely we will need 'education for sustainable contraction'. In the imminent post-growth age, the fundamental purpose of education has to change towards building resilience. A research team (Crownshaw et al) suggests that:

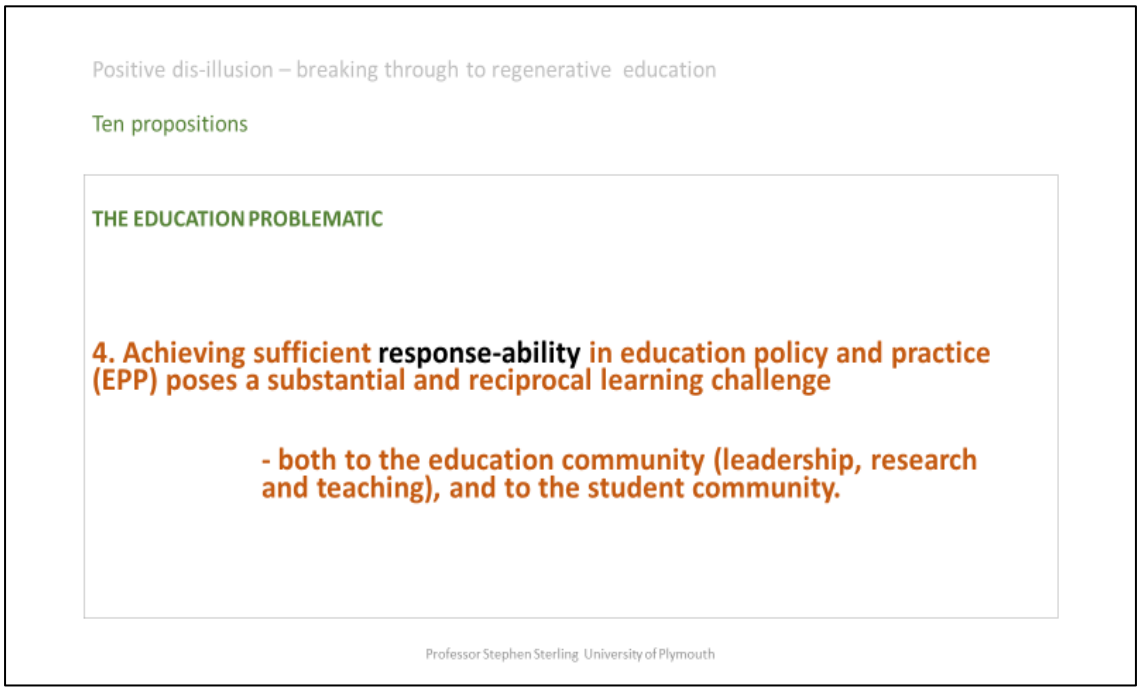
> …..two key aims must be emphasized …: improving holistic, transdisciplinary education cognizant of ecological limits, *and*
> averting deleterious behaviors towards the environment that risk further reducing carrying capacity.

These, they say, are 'vastly different priorities' compared to the current model.

But changing priorities requires transformative learning *within* the education community itself.

Which takes us to the next proposition – which is a little wordy!

SLIDE 17



14. Achieving sufficient response-ability in education policy and practice (EPP) is a substantial and reciprocal learning challenge – both to the educational community (leadership, research and teaching), and the student community.

The logic here is that education cannot be an agency of the social transformation that is needed unless the education community is itself transformed.

As UNESCO-based authors have argued:

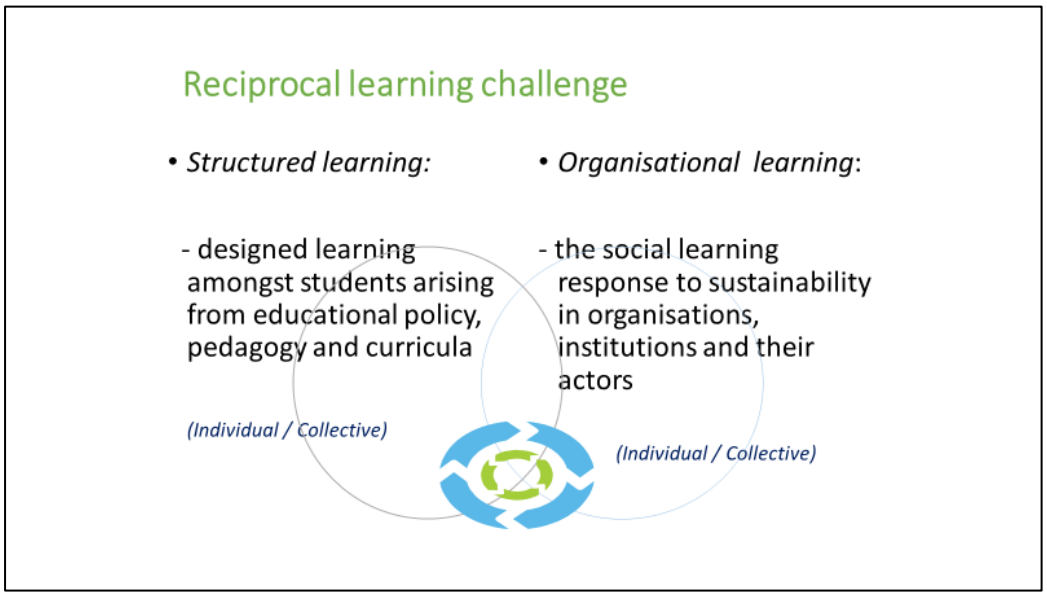
> ....in order to act as a driver for change, education itself needs to change, to become transformative, to change values and behaviours. (Leicht, Combes, Byun, Agbedahin 2018, p29).

It's very clear from international experience that educational institutions that *have* grasped the implications of the current crises seriously, also recognise that the whole educational community has to be part of the on-going learning process.

The scope of this challenge is better understood if we make two sets of distinctions about learning:

The first set concerns *arenas* of learning: that is, distinguishing between the structured *curricular learning* and the *organisational learning* arenas.

SLIDE 18



Structured learning is of course what all universities support: that is, programmes for students; and it is this arena that institutions typically address when they wish to increase their response to sustainability issues.

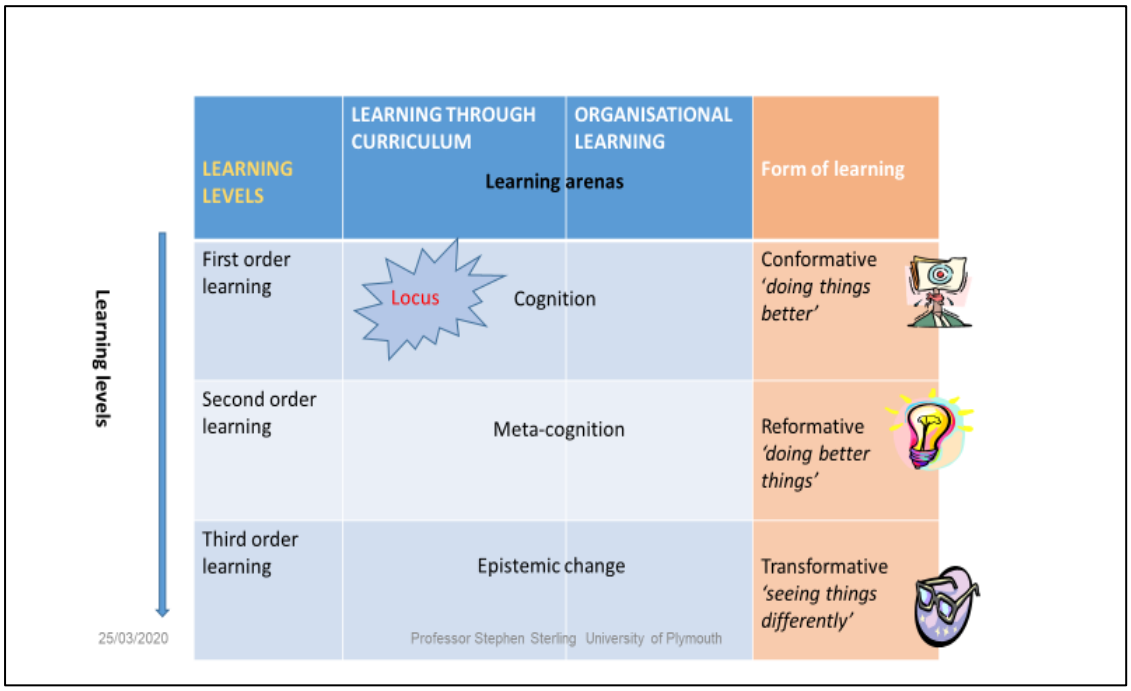
The organisational learning arena concerns the social learning that policy-makers, professional staff and practitioners may themselves experience formally or informally.

These two arenas have a reciprocal relationship. Sufficient attention to such *institutional learning* is absolutely critical to progress in the curricular arena,

and also directly affects the possibility of whole institutional change including leadership and governance, partnerships, strategy, campus management and operations, community engagement, research and curricula.

The second set of distinctions concerns *levels* of learning. See the first and fourth columns in this slide:

SLIDE 19



This again draws on Gregory Bateson's work (1972) who distinguished between three depths of learning and change.

First-order learning refers to doing 'more of the same', that is, change within particular boundaries and without examining or changing the assumptions or values that inform what you are doing or thinking.

Second-order learning or meta-learning refers to a significant change in thinking - or doing - as a result of examining assumptions and values,
and is more about understanding how the subjective world affects external practice.

From this distinction it is possible to see that most learning promoted in formal education in schools and higher education is of the first order variety, being content-led and information-based, with a transmissive pedagogy.

Beyond these two learning levels, Bateson also distinguished a *third order,* which refers to paradigmatic change, that is, deep learning which is transformative.

The importance of these two sets of distinctions (as shown in Slides 18 and 19) is that, put together, they allow us to see that:

a) the locus of attention in education tends to be on first order learning in the curriculum arena,

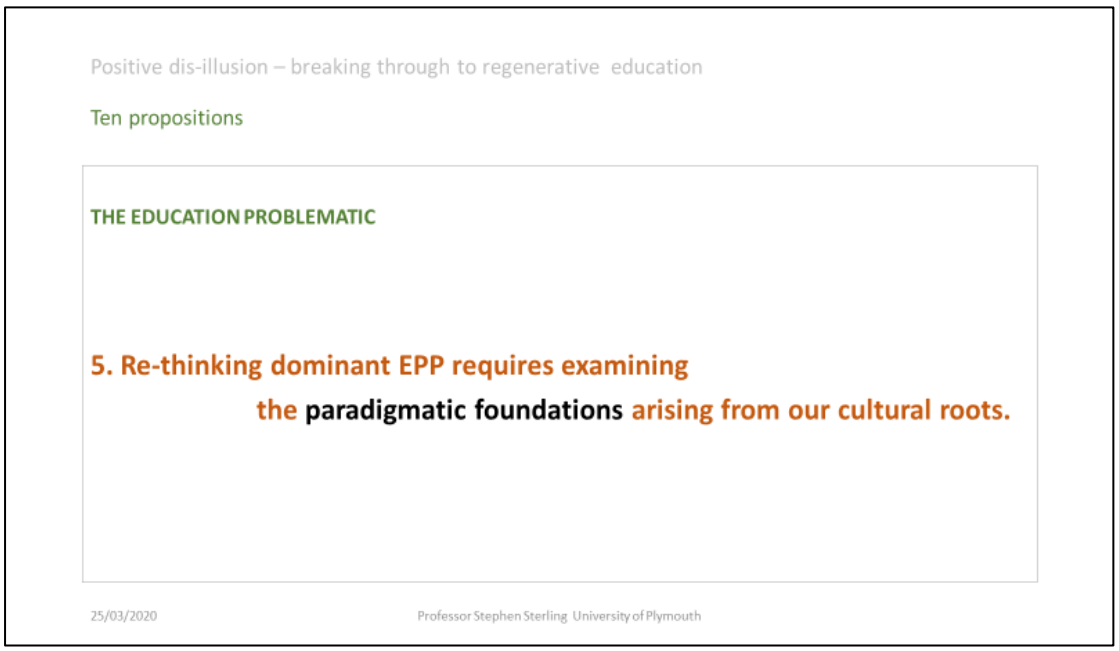
and b) that purposeful organisational learning is rare. (See 'locus' on SLIDE).

Rapidly growing awareness of global crises is now precipitating second and for some, third order, social learning across society

- but educational institutions tend to be behind the curve in this realignment.

But why? This brings us onto the next proposition.

SLIDE 20

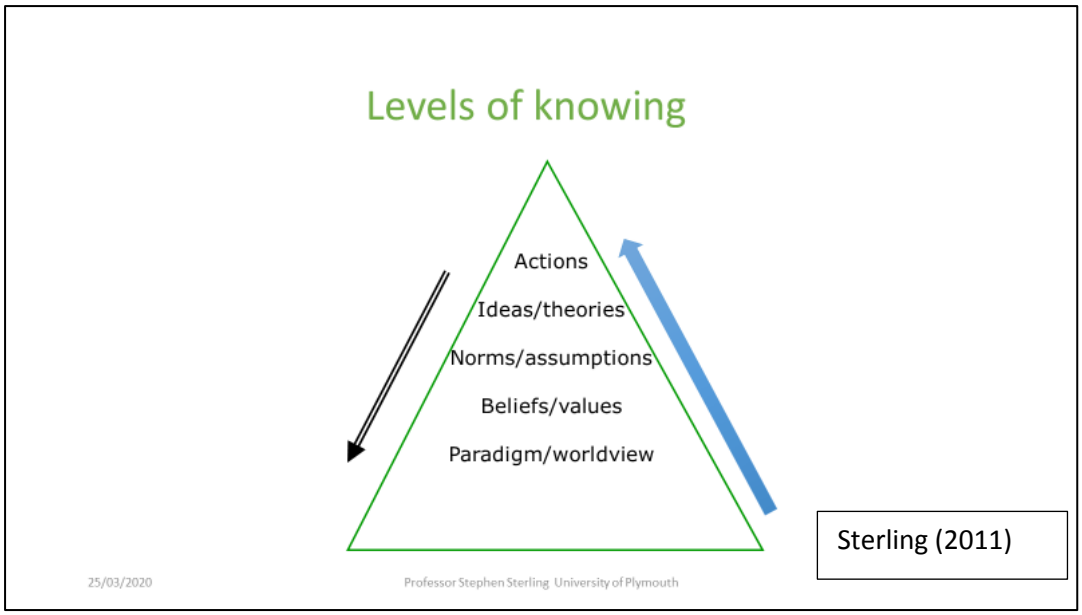


15. Re-thinking and regenerating dominant EPP requires examining the paradigmatic foundations arising from our cultural roots

In proposition 3, I argued that the prevailing educational paradigm reflects the wider cultural paradigm or worldview.

So if we can get a better handle on **that**, it helps us get a reflexive view of dominant educational

SLIDE 21



This suggests that there are levels of knowing operative in the realm of human belief, perception, and action, which are mutually affecting but in a loosely stratified relationship.

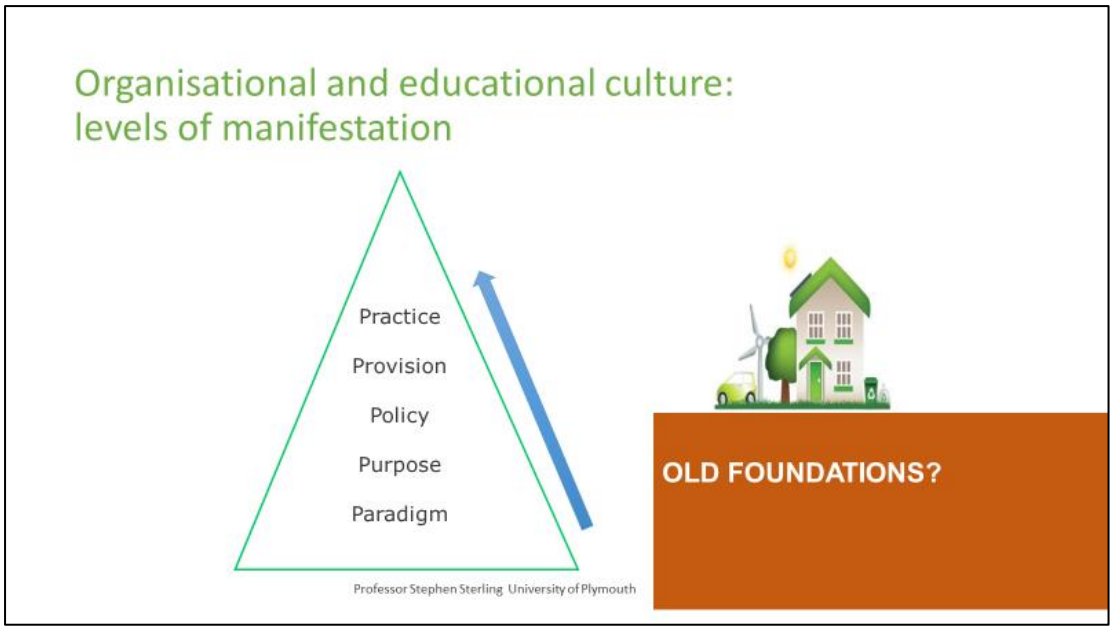
So the more immediate, conscious, and action elements are influenced by, *deeper levels of knowing*—which may or may not be examined and brought to consciousness.

This has relevance within individual and collective contexts, including across societies where a particular worldview orientation is shared.

Our cultural inheritance from the scientific revolution has been a mechanistic and material ontology, and an epistemology that was objectivist, reductivist, and dualist.

Now let's briefly relate this model to the realm of education.

SLIDE 22



When institutions are faced with the question of how to respond to the challenge of sustainability, the normal route taken is to effect some change in the 'upper levels' of 'provision' and 'practice'. This might, for example, extend to localised change in curricula or campus management.

Rather, I argue sustainability requires deep attention to education itself—its interlaced paradigms, policies, purposes, and practices. Otherwise, it is rather like building an ecohouse on old foundations that may not be adequate to the new conditions.

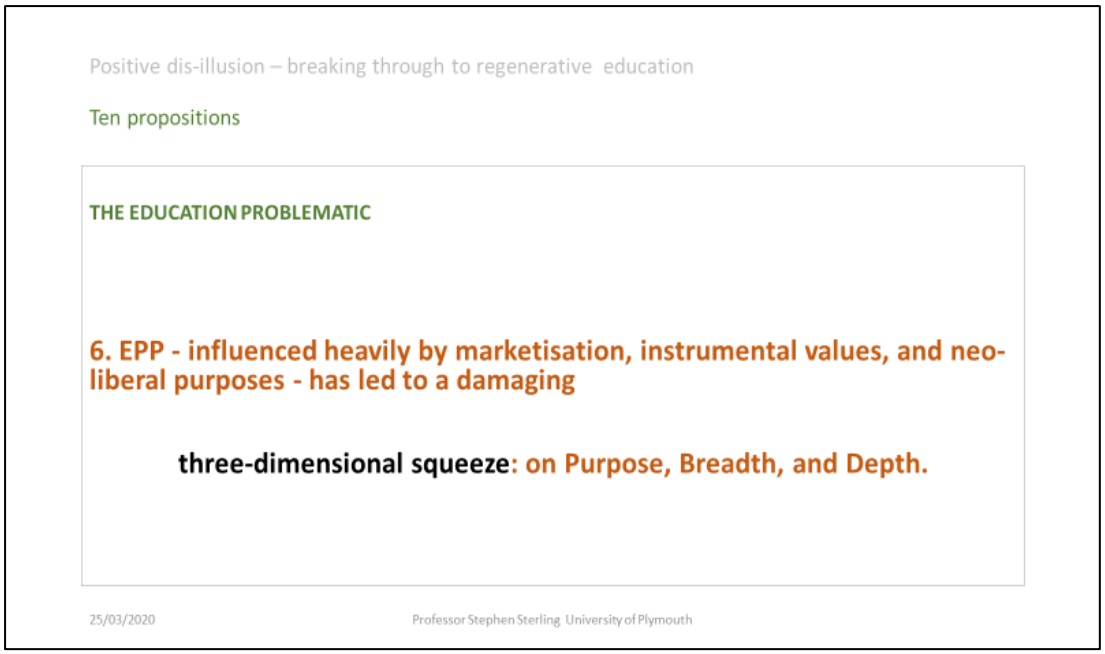
The bedrocks of the prevalent education epistemology—reductionism, objectivism, materialism, and dualism—exert a kind of hidden influence over purpose, policy, and provision and associated educational discourse.

If we see education and learners in mechanistic terms, it will result – has resulted – in the kinds of education systems that have prevailed in recent decades.

How do we achieve a kind of 'escape velocity' from outmoded and damaging ways of seeing, knowing and doing, towards modes that are caring, holistic, and regenerative and wise in practice?

First, let's go to the next proposition which concerns the effect that the prevailing narrow view of education has had upon policy and practice.

SLIDE 23



16. EPP - influenced heavily by marketisation, instrumental values, and neo-liberal purposes - has led to a damaging three-dimensional squeeze: on Purpose, Breadth, and Depth.

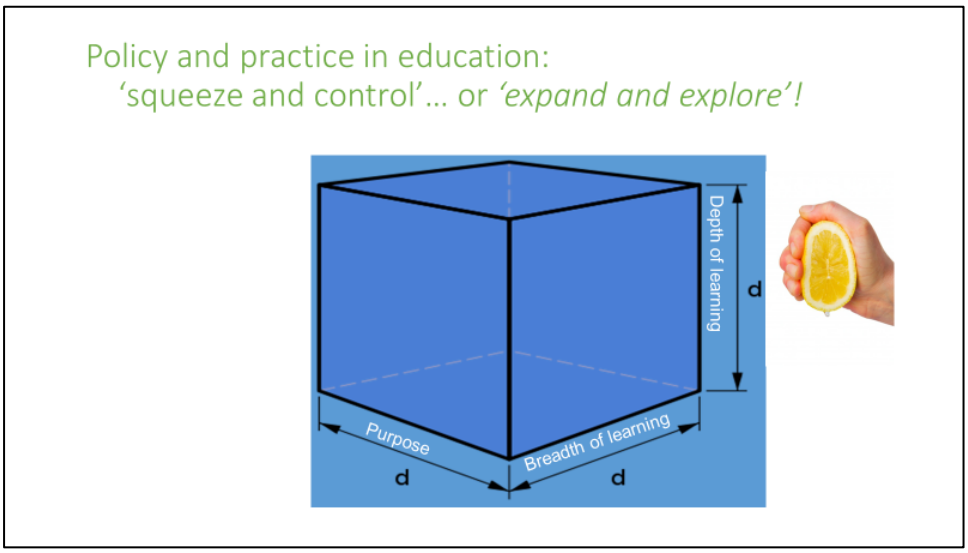
In the past 20 plus years, an already narrow educational paradigm has been compounded by an overtly instrumental view of education,
informed by the rise of neo-liberalism in economics, politics, and wider society, and by the perceived demands of a globalised economy.

Marketisation and a 'global testing culture' (Smith, 2016) have led to competition, homogenization, and standardisation nationally and internationally (for example through the PISA assessment system).

So educational discourse and research has tended to work within these control parameters.

I characterise this shift towards centralised control as a 'squeeze' on older liberal and progressive conceptions and models of education. The squeeze has affected three dimensions ('d' on the slide):

SLIDE 24



So there has been a squeeze on *Purpose* (what we think education is for) where currently economistic, "business-facing," and vocational trajectories are increasingly dominant, replacing older liberal education and humanistic conceptions;

On *Breadth* (how educational content is conceived), where (STEM) subjects are valued above arts and humanities, and specialisation above inter disciplinarity; and, a squeeze on…

Depth of learning (the nature of the learning experience), where open-ended inquiry and transformative and transpersonal learning are the exception.

The narrowing influence of neo-liberal thinking on the *perception, conception* and *practice* of education needs to yield to an expanded paradigm – which I will sketch out later.

This Squeeze makes it harder for education policy and practice to address social and ecological wellbeing. But this argument is not new. I sometimes half-jokingly suggest that education is a slow learner.

The renowned thinker and economist EF Schumacher called attention to the need for education to remake itself some 45 years ago .

SLIDE 25 (E F Schumacher)

The need to re-make education

'The volume of education has increased and continues to increase, yet so do pollution, exhaustion of resources, and the dangers of ecological catastrophe.

If still more education is to save us, it would have to be education of a different kind: an education that takes us into the depth of things.'

- E F Schumacher (written 1974, published 1997)

A deep learning response within educational thinking, policy making and practice is required based upon an emerging relational or ecological worldview, already burgeoning in diverse civil society movements.

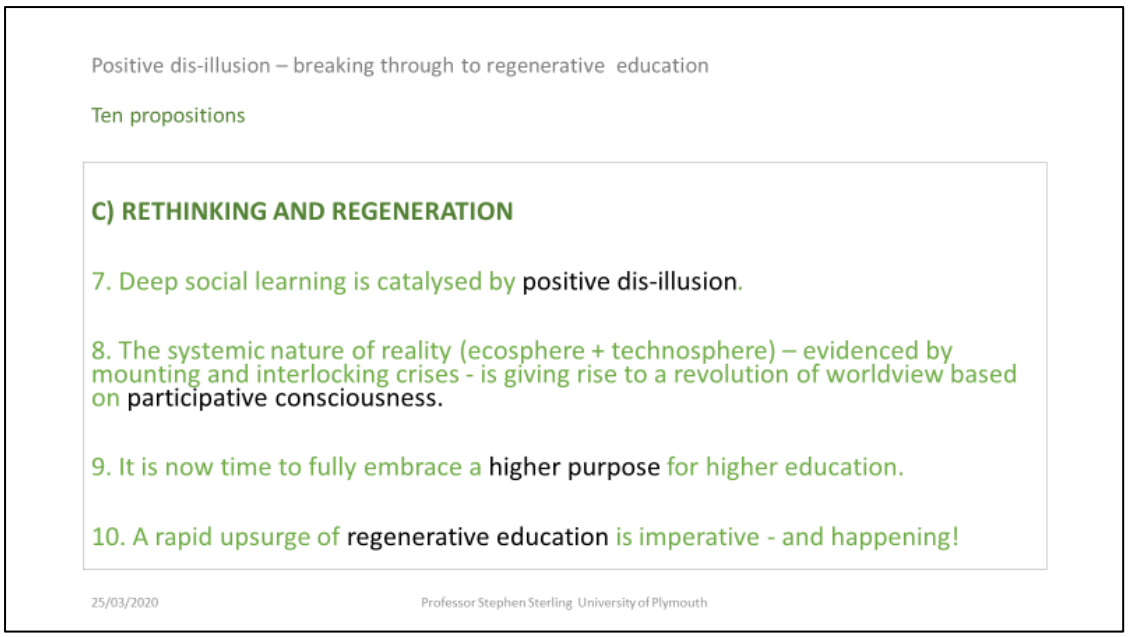
This takes me to my third and final section - which is the second part the presentation.

(Positive dis-illusion and everyday consciousness – breaking through to regenerative education in ten `propositions)

Part Two

SLIDE 26 (Section C)

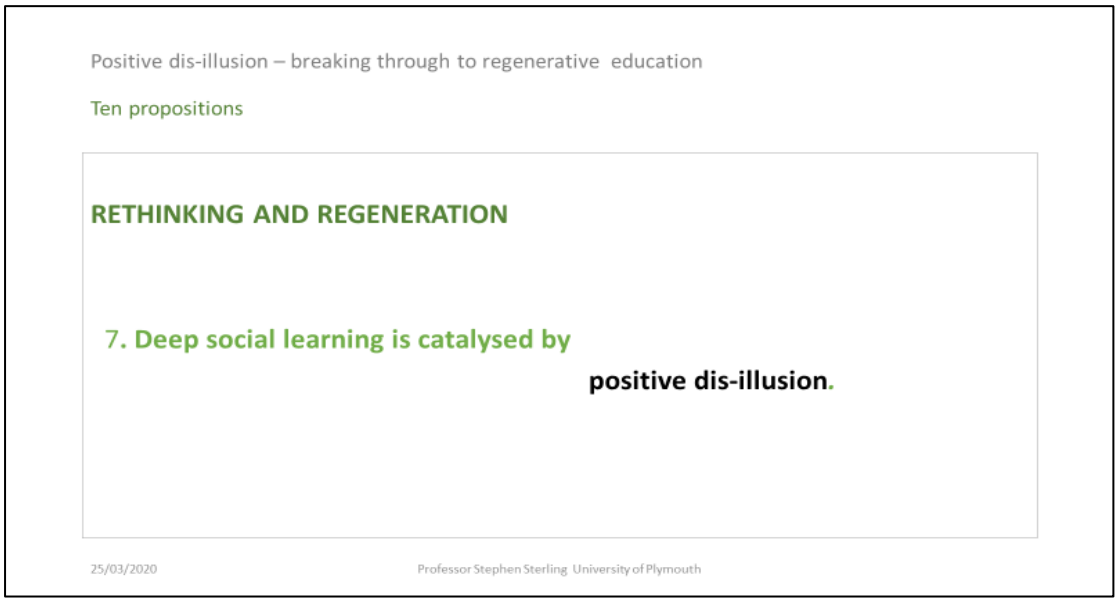
These are the remaining four propositions.



C) RETHINKING AND REGENERATION

…..Starting with the seventh proposition

SLIDE 27



7. Deep social learning is catalysed by *positive dis-illusion*

The first step to transformative learning and change - on an individual, community, institutional, or societal level - is a *necessary crumbling of key assumptions*

- in the face of evidence that suggests they are increasingly untenable and hard to justify.

The word 'illusion' means an erroneous perception of reality (as outlined in proposition 1).

Mounting evidence of systemic crises - with the volatile climate the most obvious sign - is leading to 'dis-illusion'…

So……increasingly widespread questioning of long-held beliefs, values and assumptions, is occurring and this process has now been accelerated by the onset of the corona virus.

Specious assumptions include that:

- business as usual is inevitable
- we are essentially separate from the environment and nature.
- ecological systems are a subsystem of the economy
- economic activity must be paramount and indefinite economic growth is desirable and possible
- we will 'conquer' nature
- the future is stable and assured
- science and technological innovation will solve all problems
- the next generation will enjoy a higher quality of life

For some, this process of dis-illusion is painful. It is contingent or *reactive learning*, where people's worldview is uncomfortably challenged.

But for increasing numbers of people, this an experience of *positive* dis-illusion, because it allows them to embrace exciting and new ideas of regeneration, innovation, and redesign that offer hope for the future.

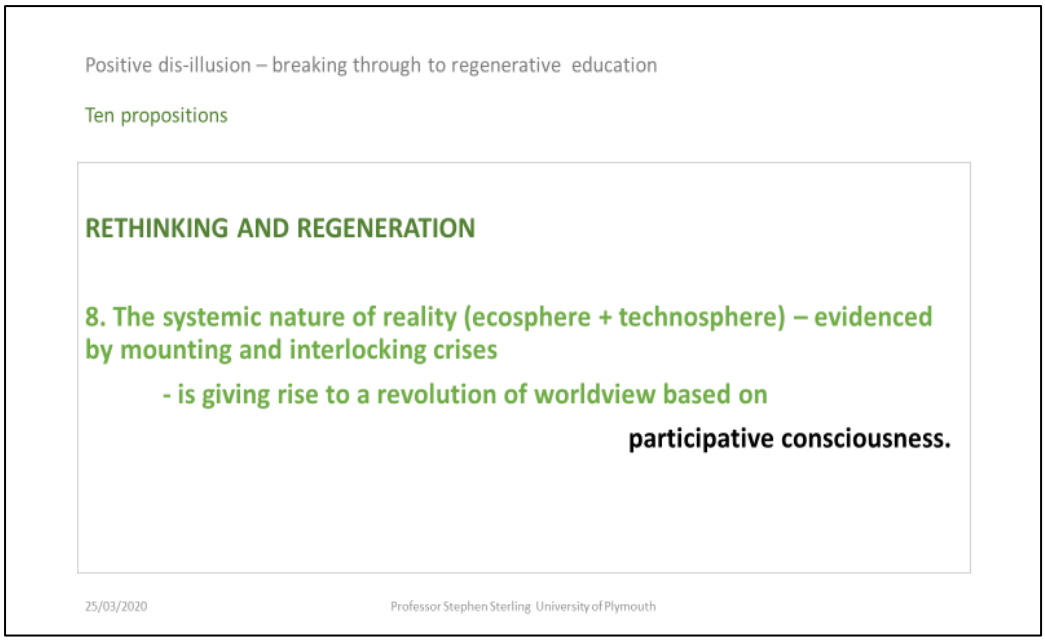
And this is what I call *anticipative learning* - which is reflexive, and critically self-aware, and is directed at wise, corrective action in the light of evidence.

This is the intentional un-learning, re-learning and new learning we looked at earlier.

It involves more than a questioning of assumptions, but more deeply, the emergence of an alternative worldview which may be termed holistic, ecological, and systemic.

Which brings me to the next proposition.

SLIDE 28



8. The systemic nature of reality (ecosphere + technosphere) – evidenced by mounting and interlocking crises - is giving rise to a revolution of worldview, based upon participative consciousness.

Current crises -particularly gross inequity, conflict, environmental destruction and now a pandemic – are fundamentally systemic. So a systemic reality necessitates a systemic worldview - that is relational, or ecological.

Now here's a radical idea – there's no such thing as the environment!

I was struck years ago, by an idea in a book by Kenneth Boulding (1978 31) (who was one of the founders of ecological economics):

> We must look at the world as a whole…as a total system of interacting parts. There is no such thing as an 'environment' if by this we mean a surrounding system that is independent of what goes on inside it.

The term 'the environment' is useful in everyday employment, but idea of 'the environment' as some sort of separate reality is delusional - and dangerous because we hive it off into a separate box mentally and in policy terms.

Now, the linking of human activity with the dangerous consequences of the heating of the Earth's systems is forcing contingent learning amongst swathes of the public and decision makers, a late awakening to some kind of systemic awareness - that many environmentalists have been demonstrating for years.

Hence, the dawning of what is termed 'participative consciousness' the awareness that everything really does relate to everything else: that all actions have consequences – from miniscule to massive, and from short term to long term.

Far from being detached and unaffected observers, we are - unavoidably - participants inside a greater whole: we are not on the Earth, but *in* the Earth, inextricably actors in the Earth's systems and flows, constantly affecting and being affected by the whole thing, natural and human, in dynamic relation.

If we accept Paul Raskin 's challenge (at the head of my abstract) to 'think critically about why we think what we do – and then to think and act differently',

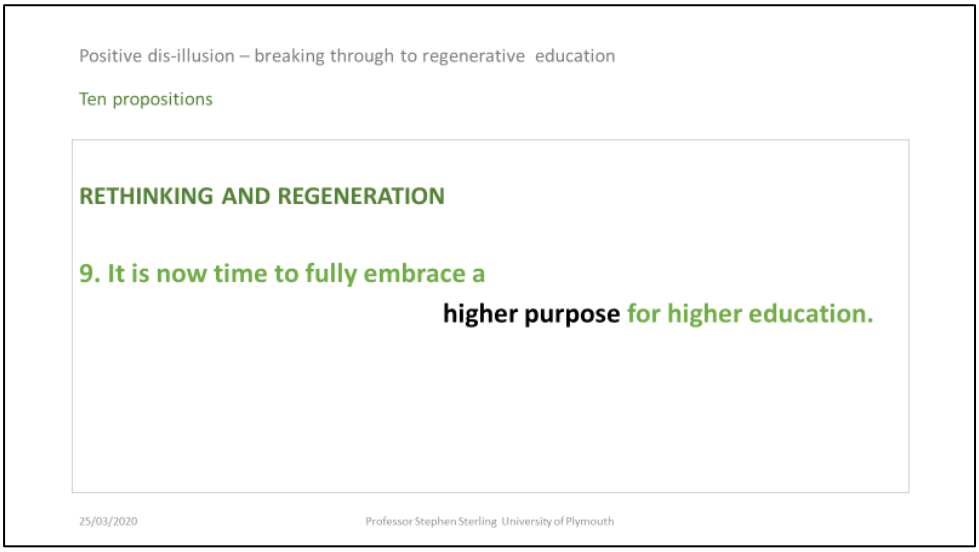
a shift of focus can occur from relationships largely based on separation, control, manipulation, individualism and excessive competition ….towards those based on participation, appreciation, self-organisation, equity, justice, sufficiency and community.

This worldview is ecological, life affirming, and regenerative and it's playing out in myriad social movements across the world.

But it's also inspiring great educational work, albeit often within the corners and margins of the mainstream – which now needs to come on board.

To proposition 9.

SLIDE 29



9. It is now time to fully embrace a higher purpose for higher education.

Let's start with a quote from Cristina Escrigas:

SLIDE 30

A higher calling

'HEIs are serving a failing system in need of reinvention and are losing the capacity to engage in critical reflection and advance ways of thinking and acting that go beyond their immediate mandates.

In an increasingly individualistic and consumerist society, social responsibility gets lost in the noise of markets, financial metrics, rankings, and competition.'

-A Higher Calling for Higher Education,
Cristina Escrigas, 2016, Tellus Institute

http://www.tellus.org/tellus/publication/a-higher-calling-for-higher-education

So universities tend to be 'inside-out' institutions, meaning that their prime focus is inwards - on performance, rather than their social and environmental responsibility and impact.

The older convention of higher education as a public good has been increasingly usurped by the view that it is a private good…

…simultaneously accompanied by the rise of private and commercial institutions that bypass the notion of education for the common good and social wellbeing.

The challenge now is to recognise and embrace an *expanded* educational paradigm. This slide attempts to model the three aspects involved.

SLIDE 31

Towards an expanded education paradigm

Paradigm constituents	Domains of knowing	Dimensions of learning	Manifested as:
Epistemology	Perception	Purpose	Aims
Ontology	Conception	Breadth	Curriculum
Methodology	Practice	Depth	Pedagogy

25/03/2020 Professor Stephen Sterling University of Plymouth

So returning to the three dimensions of Purpose of education, and on Breadth and Depth of learning (outlined under Proposition 6):

these can be mapped onto the three dimensions of human knowing and experience, these being *perception* – how we see things, *conception* – what we know, and *practice* – how we act in the world.

In each dimension, a more holistic and ecological educational paradigm is needed and can be achieved through *expansion.* So: a broader sense of purpose; more breadth and interdisciplinarity in curriculum; and more participative and transformative pedagogies. This liberation allows education to remake itself fit for our times.

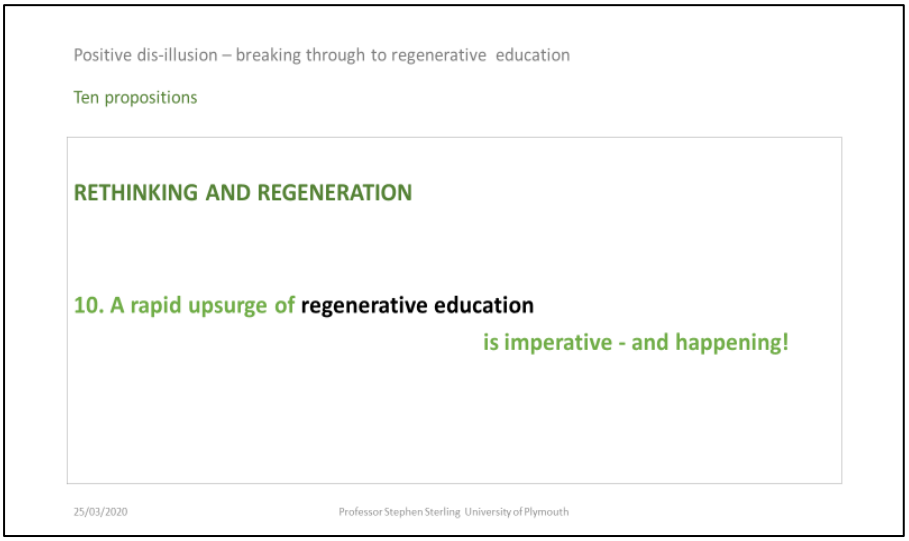
Part of re-purposing education for our times involves reclaiming some of its earlier focus on inner work, reflected in liberal and progressive traditions, and, with a foot on these foundations move towards something less materialist, exploitative, short term and individualist than currently prevails.

We are not starting from scratch. For a long time, there has been a counter educational current reflected in such practices as progressive education, learner-centred and experiential education, emergent learning outcomes, liberal arts education, inter- and transdisciplinarity, participative pedagogies, community-based service learning, whole institutional change, and more latterly, transformative and transpersonal education.

These expressions of a more ecological and humanistic educational paradigm indicate ways in which the instrumental, neo-liberal control of educational policy and practice can be challenged, and a necessary degree of reclamation and reorientation can be achieved, not least at local level.

This brings me to my last proposition.

SLIDE 32



10. A rapid upsurge of regenerative education is imperative – and happening!

We have a short time to ensure any kind of liveable future for ourselves and other Earth species.

This raises deep questions for virtually all areas of human activity but especially challenges education whose very *raison d'etre* is preparation for life: which exclusively is designed to affect values, dispositions, understanding, and competencies.

Futurist Paul Raskin (2012:12) suggests that higher education can either drift along with the tides of change, or intentionally choose and contribute to human and global betterment.

The key is re-purposing, and engaging through a 'culture of critical commitment' in educational thinking and practice.

The words regeneration, reinvention, rethinking, and importantly 'reclamation' come to mind: reclaiming the meaning and purpose of education from the narrow conception that has informed policy and practice over recent decades. And there is evidence that it is happening.

Until late 2019, I was co-chair of the UNESCO–Japan ESD Prize international jury. In that role, I've read close to 500 outstanding submissions from formal and non-formal projects across the globe. They reflect a heartening level of energy, commitment, inventiveness, courage and determination to empower people to make a positive difference to their locales and spheres of influence. This is a kind of authentic—rather than commodified—education that is already achieving a difference in many projects and initiatives.

In this way, education as a vehicle of social reproduction and maintenance, is superseded by a vision of continuous re-creation or co-evolution where leading edge education on one hand, and progressive movements in society on the other, are engaged in a relationship of mutual transformation.

With the signs of the 'Great Unravelling' increasingly evident, we need to enact 'the Great Turning' (Joanna Macy) – alternatively labelled 'the Great Work' (Thomas Berry) ,or 'the Great Transition' (Paul Raskin). This urgency necessitates agency - and that is one thing education can claim a degree of monopoly upon.

By offering a more whole way of seeing and being - a regenerative, ecological, life-affirming paradigm can help shape new pathways for a more hopeful and secure future. There's a fork in the road, and education has to make a choice.

Young people are fervently waiting for us educators to catch up with them, to empower them through positive dis-illusion, and to help them lead the future. THANK YOU.

SLIDE 33

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References

Bateson, G. (1972) *Steps to an Ecology of Mind,* Chandler, San Franscisco.

Boulding, K. (1978). *Ecodynamics – a New Theory of Social Evolution*, London: Sage Publications.

Crownshaw, T., Morgan, C., Adams, A., Sers, M., dos Santos, N., Damiano, A., Gilbert, L., Haage, G., Greenford, D. (2018), Over the horizon: Exploring the conditions of a post-growth world, *The Anthropocene Review,* 1

Escrigas, C (2016), *A Higher Calling for Higher Education*, Boston, MA: Tellus Institute. Retrieved from http://www.greattransition.org/publication/a-higher-calling-for-higher-education.

Laszlo, E. (1989) *The Inner Limits of Mankind,* One World, London.

Mumford, L. (1964) *The Myth of the Machine – the Pentagon of Power,* Harcourt, Brace, Jovanovich, San Diego.

Raskin, P (2008) World lines: A framework for exploring global pathways. *Ecological Economics,* 65, 461-470.

Raskin, P (2012) Higher education in an unsettled world: handmaiden or pathmaker? In Global Universities Network for Innovation (GUNI) (2012) *Higher Education's Commitment to Sustainability: from Understanding to Action* World in Higher Education Series No. 4, Barcelona, Spain: GUNI.

Smith, W (2016) *The Global Testing Culture – shaping education policy, perceptions, and practice,* Symposium Books, Oxford.

Schumacher, E. F., (1997) *'This I believe' and other essays,* Green Books, Dartington, (essay first published in 1974).

Sterling, S (2011) 'Transformative learning and sustainability: sketching the conceptual ground', *Learning and Teaching in Higher Education,* Issue 5, 2010 -11, 17-33

Sterling, S (2019) 'Planetary Primacy and the Necessity of Positive Dis-Illusion', *Sustainability: The Journal of Record*, Vol 12, issue2, April 23rd.
https://www.liebertpub.com/doi/full/10.1089/sus.2019.29157/
https://doi.org/10.1089/sus.2019.29157