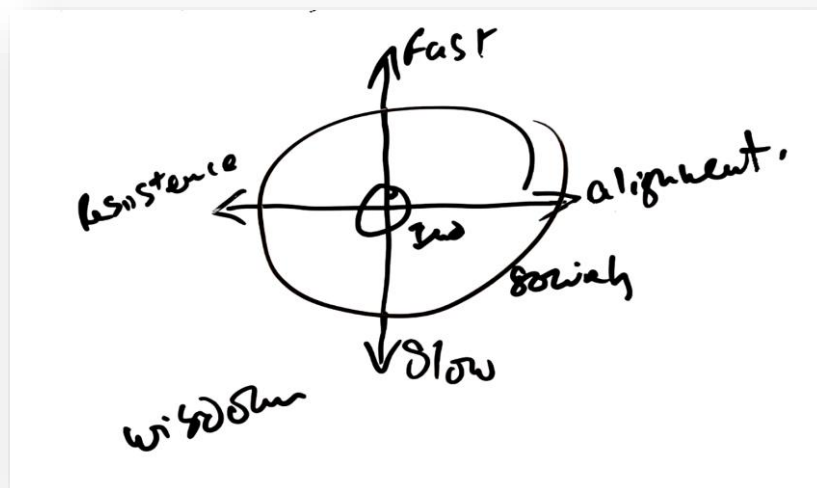


The fierce urgency of now: Navigating paradoxes in sustainability education



Online Conference Proceedings
May 2020

Canterbury Christ Church University

Contents

Links to recordings of 'live discussions'	3
Recorded presentations and links	3
Welcome and Introducing the Paradox Model	3
Abstracts	4
Paper Presentations	4
Quadrant 1: Fast Resistance	4
Quadrant 2: Fast Alignment	10
Quadrant 3: Slow Resistance	13
Quadrant 4: Slow Alignment	20
Workshops	23
Contact details for presenters	25
Guidance for submitting papers to the IJSHE Special issue: "Navigating Paradoxes in Sustainability Education" ..	30

Links to recordings of 'live discussions'

Wednesday 20th May
Q&A Quadrant 1: Link
Q&A Quadrant 2: Link
Workshop Coming Back to Life – An Invitation to Experience The Work That Reconnects. <i>Dr. Hilary Leighton:</i> Link
Thursday 21st May
Workshop New guidance for Sustainability Education in HE in the face of the climate emergency <i>Paul Warwick, Centre for Sustainable Futures Lead, University of Plymouth; Carolyn Hayles, Cardiff Metropolitan University:</i> Link
Q&A Quadrant 3: Link
Q&A quadrant 4: Link
Closing Session Navigating the paradoxes: Panel discussion and outcomes: Link

Recorded presentations and links

Welcome and Introducing the Paradox Model

Welcome and Introduction, by CCCU Vice-Chancellor Professor Rama Thirunamachandran, and Peter Rands, Sustainability Development Director; **Introducing the Paradox Model**, by Nicola Kemp and Stephen Scoffham, Education for Sustainability, CCCU [Link](#)

Abstracts

Paper Presentations

Introducing the Paradox Model *Dr Nicola Kemp, Dr Stephen Scoffham, Canterbury Christ Church University* [Link](#)

The growing awareness of climate change and the wider global environmental emergency has led to calls for decisive and immediate action from all sections of society. In this presentation we consider the question of how universities and other Higher Education Institutions should respond and what role might they best adopt in current circumstances. We outline a framework which places sustainability within the contradictory, messy and uncertain terrain that characterises Higher Education. We have called our framework the paradox model because it is constructed around two fundamental tensions: (1) alignment or resistance to current practices (2) fast or slow responses to sustainability issues. We represent these two tensions as intersecting axes on a diagram which creates four quadrants in which a diverse range of activities can be located. The point where these two axes intersect is particularly significant and provides a place from which to navigate responses both individually, collectively and institutionally. We contend that wisdom provides a guiding principle for discerning which type of response might be appropriate in any given context. Applied in an educational context this suggests the need to ask 'is what I desire desirable for myself, for others and for the fragile planet that supports us'. It may also begin to suggest a route towards institutional change and the vision of the ecological university of the future.

Quadrant 1: Fast Resistance

- 1. MOOCs, Sustainable Development and Personal Reflection: a recipe for change?** *Eleni Michalopoulou, Ash Tierney, Ed Atkins and Chris Preist, University of Bristol.* [Link](#)

Many people wish to engage with the goals of sustainability but may feel overwhelmed and unsure how to. The Sustainable Futures Open Online Course (UK&I Green Gown award winner, 2019) addresses this.

It offers a structure for self-reflection around personal motivations, skills and challenges alongside learning about the many different roles people can take to make a difference to sustainability goals. It runs 3 times a year, and has been taken by around 10,000 people, from over 140 different countries.

Participants learn through video interviews with university staff, students and citizens of Bristol who have engaged with sustainability challenges in different ways.

They share stories of the challenge, the roles they have taken working with others, and what they have done. Additionally, they share their own personal reflections on motivation, happiness, the struggles they have faced, and what helps them keep going when things are difficult. Online learners participate in group discussions on themes, and individual exercises of self-reflection.

In this paper, we will present an overview of the course development, deployment and impact on learners. Though originally briefed to be an employability and skills exercise, the course subverts (rather than resists) the dominant narrative. Qualitative analysis of student comments show that they: (i) Learn more about themselves and what motivates them; (ii) learn to appreciate the importance of community action; (iii) develop an increased understanding and practice of self-care and resilience; (iv) are inspired to action – in their personal lives, in their communities and in their (future) careers.

2. **Shared conversations.** *John Parry, Senior Teaching Fellow at the University of Sussex* [Link](#)

As someone who for 50 years has had to work within a slow resistance frame, and partially willing to do so because we had time then, it is both depressing and uplifting to see the sense of urgency being generated now. 'Professional wisdom' is not a phrase often employed so it is refreshing to see it being used. What, then, can a 'keeper of the long view' (Hayward, 2011) with a little life-experience wisdom, bring to the current situation? And do, or should, personal journeys have a role to play? If so, what academic underpinning might be relevant? What within 'the slow' can help illuminate 'the fast'?

The authenticity provided by a personal green journey over several decades seems to be of value to the students I teach currently - especially if some of the anecdotal meanderings are shown to be founded on environmental theoretical concepts such as civic ecology (Krasny, 2009); emergence and design (Capra, 2002); Knowledge Forum (Scardamalia, 2000) and longitudinal studies of pupils' conceptions of matter (Hellden, 1995)

Oakeshott's (1972) call for valuing 'conversations between the generations' comes to the fore with the iconic head-to-head photograph of Sir David Attenborough and Greta Thunberg working, hopefully, within a common third frame (Storo, 2013). Wisdom is required in how such journeys are presented - a 'told you so' arrogance does not inspire; a fiery, fast resistance of anger and frustration demeans.

3. **Use of the SDGs in sustainability education: A useful framework or a dangerous distraction?** *Angela Druckman, Professor of Sustainable Consumption and Production, & Head of Sustainability in the Curriculum, University of Surrey* [Link](#)

A major milestone in global progress towards sustainability was reached in 2015 when 193 countries signed up to the United Nations Sustainable Development Goals (SDGs). Used together, the 17 Goals set out a comprehensive roadmap for sustainable development. This presentation asks:

- **Is utilisation of the SDGs in sustainability education a useful framework or a dangerous distraction from the threats of climate change and biodiversity loss?**
- **Can alternative representations of the Goals overcome its flaws?**
- **Are other frameworks more useful?**

The SDGs have gained wide take-up amongst companies, governments, NGOs and educational establishments. Reasons for their success include their breadth, easy of understanding, and they are generally inoffensive - who would not want to sign up to "No poverty" and "Zero hunger"? Of particular importance to sustainability in Higher Education, the SDGs offer something of relevance to every discipline.

But this frontage disguises serious flaws. Seventeen goals are generally too many for people to grasp. This leads to selective use of individual Goals (or subsets of them), which goes directly against the holistic intentions of the SDGs, and enables sidestepping of major issues such as climate change and biodiversity loss. Moreover, SDG8 "Decent Work and Economic Growth" enforces the mantra that perpetual economic growth is desirable, even in the face of overwhelming evidence that economic growth drives carbon emissions.

This presentation considers alternative representations of the SDGs, and use of other sustainability frameworks. It concludes that abandoning use of the SDGs in sustainability education poses risks, so more research is required.

4. **Confronting dichotomy & hypocrisy; navigating systems change for the Anthropocene.** Darren Axe, Lancaster University [Link](#)

The Climate (IPCC, 2018) and Ecological (IPBES, 2019) Emergency agendas present a challenge of unprecedented scale. Disruption to 'business as usual' and transformative societal change is a daunting and complex paradigm. The more one engages with the change agenda, the more the journey requires navigation of dichotomy and hypocrisy where all day-to-day decisions are part of an expansive socio-economic system of non-linear impacts (Monbiot, 2019; Somerville, 2016; Berners-Lee, 2019).

There is significant evidence for the emergence of 'Eco-Anxiety' and in particular, young people feeling concern for their future (Pihkala, 2018). In an attempt to embrace the challenges of dealing with the crisis agenda, whilst embedding enthusiasm for robust sustainability (Glasser, 2016), a Personal Development Programme based on the Isle of Eigg, Scotland has been deployed for the Lancaster University Students' Union Environmental Sustainability team. The island has a 20-year connection with the sustainability agenda and the intention of the visit to this remote community is to nurture personal wellbeing through the reconnection with nature, the elements, starry skies and the slower pace of life that walking everywhere brings (Clayton and Atkinson, 2015).

References:

Berners-Lee, M. 2019. *'There is No Planet B. A Handbook for the Make or Break Years'*, Cambridge University Press.

Clayton & Atkinson, 2015, *'Lundy, Rockall, Dogger, Fair Isle. A Celebration of the Islands Around Britain'*, Ebury Press.

Glasser, H., 2016, 'Visions of Sustainability', *Sustainability (United States)*, Volume 9, No 2, pp.56-64.

Frank, R., 2020, *'How peer pressure can help stop climate change'*; The Washington Post, accessed 26/02/2020 <https://www.washingtonpost.com/outlook/2020/02/20/how-peer-pressure-can-help-save-planet/?arc404=true&fbclid=IwAR3vUuN2_BNmDTezLDGKZiPyIFap6UFxrwVcbSgEuGVxXaZW2F5qaQ6SmQ>.

Intergovernmental Panel on Climate Change (IPCC), 2018, *'Special Report on Global Warming of 1.5°C'*; accessed 25/02/2020, <<https://www.ipcc.ch/sr15/>>. Sustainability in Higher Education Conference 2020 Abstract: Darren Axe (Lancaster University)

Intergovernmental Science-Policy Platform on Biodiversity and Ecosystems Services (IPBES), 2019, *'Global Assessment Report on Biodiversity and Ecosystem Services'*; accessed 25/02/2020 <<https://ipbes.net/global-assessment>>.

Monbiot, G., 2019, *'Today, I aim to get arrested. It is the only real power climate protesters have'* The Guardian; accessed 25/02/2020 <<https://www.theguardian.com/commentisfree/2019/oct/16/i-aim-to-get-arrested-climate-protesters>>.

Monbiot, G, 2019, *'The biggest polluters' masterstroke was to blame the climate crisis on you and me'*, The Guardian; accessed 25/02/2020 <<https://www.theguardian.com/commentisfree/2019/oct/09/polluters-climate-crisis-fossil-fuel>>.

Monbiot, G., 2017, *Out of the wreckage: a new politics for an age of crisis.* Verso Books.

Pihkala, P., 2018, The Wicked Problem of Climate Change, *Zygon*, vol. 53, no. 2., pp. 545-569.

Shove, E., 2014, 'Putting practice into policy: reconfiguring questions of consumption and climate change', *Contemporary Social Science*, vol.9, no.4, pp.415-429.

Somerville, M., 2016, 'How I deal with the unbearable hypocrisy of being an environmentalist'; The Guardian; accessed 25/02/2020 <https://www.theguardian.com/lifeandstyle/2016/apr/05/environmentally-friendly-green-living-ideas>

5. Living labs, mycelial networks and wild epistemologies. Reflections on emergent pedagogies in Higher Education in a time of crisis. *William Rowlandson, University of Kent* [Link](#)

This paper is grounded in the riddles of uncertainty: the future is uncertain yet we must act, uncertain how to act. There are urgent calls for radical system change – ending ‘business as usual’ – yet we are embedded within systems whose operational dynamics depend on business as usual. There are cries of emergency, yet emergency can breed panic, confusion and paralysis as much as clear thought, problem-solving and action. There are calls for sustainability, but often only within sub-systems of larger unsustainable systems. There are calls for sustainable development and sustainable growth dominated by conventional ideologies of development and growth. Higher Education, in particular, presents some particularly puzzling conundrums, manifest keenly in institutional responses to escalating financial, political, environmental and climate crises.

Attentive to this state of uncertainty, this paper considers specific projects and partnerships at the University of Kent emerging in response to crisis, with sustainability as their driving principle (such as: the student-led Anthropology & Conservation Sustainability Working Group, Decolonise UKC, UCU industrial actions, NUS-led Responsible Futures initiative, FutureProof workshops, Beetbox Food Cooperative, Kent Community Oasis Garden, woodland fireside teaching space Billhook Nook, the Tree Ogham woodland art trail.) I argue that such projects:

- constitute examples of ‘Living Labs’ that work across professional domains and disciplines, and across institutions and wider society, to explore and inspire sustainable research, teaching and behaviour;
- constitute non-aligned yet co-operative challenges to the market and growth-based ideologies that govern the sector;
- challenge conventional pedagogies, through seeking non-reward-based collaborations and partnerships, shallow (or non-existent) hierarchies, sensitivity to individuals’ particular expertise and abilities, flexibility in the use of time and location, and outputs judged on efficacy rather than profitability;
- constitute projects of (re)wilding, in that they enrich, diversify and complexify educational models that operate with rigid epistemological, ontological and methodological assumptions;
- constitute dynamic responses to crisis often in advance of centralised executive and managerial response, and that their achievements are marked by their eventual inclusion in official institutional strategy and marketing material; (but what is lost in the movement from periphery to centre?);

In conclusion, I argue that such initiatives are blossoming throughout the sector, represent vital educational experience, fulfil institutional obligations for employability and civic engagement, and are driving sustainable system change.

6. Navigating paradoxes in sustainability education through the depths of a moment. *Tansy Watts, CCCU* [Link](#)

The Anthropocene has been described as a process in which we are “undoing civilization and in our dissolution becoming something else” (Johnson, 2019, loc. 196). However, that such evolutionary processes are often invisible and “distributed across disparate networks or climactic events, generational drift, new artistic

sensibilities, and life-world transitions“ (Johnson, 2019, loc. 317). My research has engaged with a Froebelian perspective through which life’s paradoxes present grounds “to find the unity that connects them” (Froebel, 1887, p50). This has been explored through children’s increasing dependence on adults for outdoor play that now offers an opportunity that “unites the germinating life of the child attentively with the ripe life of experiences of the adult and thus fosters the one through the other” (Froebel, cited by Liebschner, 1992, p24). These experiences have been investigated through sensory ethnography and an understanding that “human meaning does not emerge only from language; it engages with the ways in which our sensory experience is pre-or non-linguistic, and part of our bodily being in the world” (Karel, 2013).

Child-worn Go-Pros have captured children’s “unique perspectives” (Burbank, 2018, p323) and these have demonstrated the potential to disrupt adult perceptions even if only for a moment. Children and adults can share sensory, exploratory and storied relations with place that might be considered significant within holistic terms (Gebser, 1949). The depth of a moment offers an extra dimension in navigating alignment and resistance and may have something to offer education in its engagement with contemporary paradoxes.

Bibliography

Burbank, B, McGregor, D and Wild, M (2018) ‘My special, my special thing and my camera!’ Using GoPro as a complimentary research tool to investigate young children’s museum experiences. *Museum and Society*, 16 (3), p311 - 333.

Froebel, F (1887) *The Education of Man*, Dover: New York.

Gebser, J, (1949/1986) *The Ever-present Origin*, Athens Ohio: Ohio University Press.

Johnson, J (2019) *Seeing through the world: Jean Gebser and Integral Consciousness*, Florida: Revelore Press.

Karel, E (2013) <https://earroom.wordpress.com/2013/02/14/ernst-karel/>

Leibschner, J (1992) *A Child’s Work: Freedom and Guidance in Froebel’s Educational Theory and Practice*, The Lutterworth Press: Cambridge.

7. The trouble with sustainability education ... Challenging Western-centric discourses in sustainability education. Helen Bowstead, University of Plymouth [Link](#)

In Higher Education, there is urgent work to be done. Now is the time for a radical rethink of our educational aspirations and our social, political and environmental responsibilities. What greater paradox could there be than the ‘crisis of perception’ in the West which, according to Clarke and Mcphie (2014) is at the heart of planetary degradation, and the continued insistence that sustainability issues are viewed through a very ‘Western-centric’ lens. There is still a pervasive and dangerous tendency in the West to view human beings as separate from rather than *of the environment*, however, what urgently needs to be acknowledged is the “indissolubility of people and planet” (Clarke and Mcphie, 2014:205). The sustainability agenda calls for universities to educate students to be the socially responsible citizens and global leaders who will act as stewards for future generations, and yet dominant modes of Western intellectual production remain very much “complicit with Western international economic interests” (Spivak, 1988:271).

Many of the international students I teach know first-hand what the impact of aggressive consumption and unregulated exploitation is having on their countries and peoples. Therefore, Higher Education’s role must be to open up spaces where what it means to inhabit such a complex, super diverse and extremely precarious world can be acknowledged and explored. This paper will argue that any engagement with the UN’s Sustainable Development Goals must embrace multiple perspectives if it is to have the potential to “move selves from the endorsement of ethical principles to the actual practice of ethical behaviours” (Bennett, 2010:xi).

8. **Applied Physical Sustainability: An antidote to Efs.** Peter Harper (University of Bath) and Stephen Peake (Open University) [Link](#)

We have argued that ‘education for sustainability’ is actually the reverse: *sustainability for education*, that is, the use of sustainability themes and practices to produce well-rounded, fully educated, and strongly-motivated students. While this is entirely admirable, it is quite a different matter from the rapid transformation needed to decarbonise the world prevent irreversible loss of ecosystem services in at most two decades, the UK much faster. Our gripe is that all this ‘micro-sustainability’ has captured and eviscerated the starker underlying meanings and implications of the word sustainability, and acts as a smokescreen obscuring the clarity of vision that is now needed. We are arguing for quite a different, and far more physicalist approach, which for the time being we shall call ‘macro-sustainability’ or ‘Applied Physical Sustainability’. It won’t happen without someone making a fuss and calling a spade a spade. Here’s us throwing down the gauntlet. A full written version of this paper is available.

The table is necessarily condensed, and some references might need explanation. (1) refers to the ‘Veil of Ignorance’ conjectured by Rawls (1971) but translated into time: you don’t know which generation you will be born into. (2) can be accessed through Steffen (2015), and note Raworth’s (2012) extension. (3) refers to Jean Piaget’s work on the stages of child development; a 7-year-old can be expected to understand that ‘you can’t get a quart into a pint pot’ (Piaget, 1936).

	MICRO-SUSTAINABILITY	MACRO-SUSTAINABILITY
	NON-PHYSICALIST	PHYSICALIST
Tends to attract	Social scientists, educators, humanities teachers	Physical scientists Engineers
Time horizon	Long: 100+ years	Short: 20-50 years
Ethical perspective	Humanistic values maintained; aversion to ranking	Emphasis on sequencing of action, ranking of processes and activities; ‘temporal veil of ignorance’ (1)
Style	Holistic, wide/soft focus, both-and	Quantitative, logical, either-or
Logical frame	Using sustainability patterns to educate students	Using educational techniques to communicate sustainability patterns
Aim	To produce better citizens with humanistic sustainability values and skills	To produce critically informed graduates and professional fuss-makers
Attitude to ‘triple bottom line’ framework	The factors are co-equal: ‘Trinitarian’	Physical factors primary: ‘Unitarian’
Operating space for humanity	Raworth (2012) Doughnut	Rockström Planetary Boundaries (2)
Mode	Bottom-up, ‘leading by example’	Top-down, ‘democratic dirigisme’
Focus	Political/economic/social response to physical challenges	Physical response to physical challenges; social and economic factors considered secondary
Status	Orthodoxy, embracing a widely-understood meaning of ‘sustainability’	Minority: Conception of sustainability too literal for widespread acceptance
Structural basis	Highly theorised; academic ‘cult of complexity’?	Based on simple, basic ‘Piagetian’ concepts (3)
Locus	More common in new universities	Uncommon anywhere

Quadrant 2: Fast Alignment

1. **'Greening the Past: Putting History in its Place at the Ecological University'**. Prof. Karen R. Jones, School of History, University of Kent [Link](#)

Keywords: Environmental History, Green Heritage, Historic Preservation, Green Space, Urban Sustainability

This paper looks to combine an urgent need to engage with environmental sustainability with progressive endeavours at decolonising the curriculum to explore how humanities (and History in particular) can be brought into the service of the ecological university. It looks specifically at 'green heritage' in the city as a useful example in which the greening agenda can be used to re-contextualise historical approaches, encourage useful conversations around the role of History as a conservation and heritage management tool, and build active partnerships with local stakeholder groups.

2. **City, University of London: A Participative Case Study. What changes must the UK higher education sector make, in its approach to the management of environmental sustainability, to enable a transformational shift in its response to climate change?** Jason Clarke. City, University of London [Link](#)

Whilst a significant body of research exists looking at the environmental performance of institutions within the higher education sector, this **research predominantly focuses on approaches to the measurement and the efficacy of targeting carbon emissions at an institutional level. Here we adopt a systems approach and using the environmental sustainability management approach at City, University of London as a case study, question the transformative capacity of such a system in response to Climate Emergency.** Semi structured interviews of institutional, student and sector stakeholders, alongside participative workshops form the data collection basis from which the research attempts to identify the purpose and characteristics of the current system.

A Three Horizons approach (Sharpe, 2013) is then used to identify the purpose and system characteristics of an espoused system, more suitable to engender a transformative institutional response to Climate Emergency. The research then identifies plausible interventions to enable a shift from the current system state to the espoused system state using leverage points (Meadows, 2008) to assess their transformative capacity and enable prioritisation

The findings identify a reinforcing causal relationship between the marketisation of the UK higher education sector and increases in institutional Green House Gas (GHG) emissions. Whilst the findings also identify the need for changes at all levels (element, structure, purpose, mindset), at both sector and institutional level, actions with the capacity to engender transformational change at a sector level are prioritised.

The findings support the development of knowledge around both the scope GHG emissions and transformation within the higher education sector. Whilst the findings are specific to the case study institution and cannot be generalised across the sector, they may be informative for other institutions

Further research adopting a multi case study approach is suggested, with a view to validating these findings and identify any with wider sector applicability.

3. **Embedding circular economy and systems thinking into the designer's curriculum**, Steven Whitehill¹, Dr Carolyn Hayles², Dr Sean Jenkins¹, Jim Taylour³ and Cath Hammerton¹ ¹ Faculty of Art and Design, University of Wales, Trinity Saint David; ² Cardiff School of Art and Design, Cardiff Metropolitan University [Link](#)

Circular Economy (CE) is considered by many to be the mechanism by which sustainability can be achieved whilst maintaining growth in living standards. Implementing CE principles requires new ways of looking at the design

and manufacture of 'products'. To do this, designers need to think in new ways, and develop new skills and competencies to navigate CE systems. Where weak links or gaps in those systems exist, designers must move into these spaces and occupy them as 'manufacture niches' much as in nature, where evolution drives plants and animals to seek out and exploit unoccupied ecological habitats. The authors share an example from an action research project, where students designed with 'waste' resources and transformed them into value enhanced products. This activity helped to underscore the complexities of multifaceted systems that create 'waste', making CE ambitions difficult to achieve. Higher education is frequently siloed, material or process specific, and bounded by organisational structures which make collaborative educational activities difficult to execute which conflicts with the principles of CE. Design education must embrace a systems pedagogy, it must be rich and deep but also outward looking, porous to other disciplines, actively seeking and developing collaborative links; giving students the skills and confidence to think and act in systems and to approach problems creatively in a systems context. Students need an education that equips them not to enter and be successful in the existing status quo, but that enables them to create and manage the paradigm shift to a new (CE) norm.

4. Ask not what society can do for you, ask what you can do for society: preparing young people for their futures in a warming world, Alan Pagden (Senior Lecturer Education) CCCU [Link](#)

Some have argued that the current crisis, impending climate chaos and associated fall out, is such that we need to place society "on a war footing" (Miliband 2019, Vare 2019). In this paper I consider what this might mean for institutions of Higher Education in the UK and elsewhere. I begin by exploring the differences and similarities between historical examples of societies responding to the threat of war and the present context in which the threat is, at least for some, less clear, less imminent, even if, arguably, it is far greater. I am interested in drawing a parallel between young people's coming of age in war time and our students, the majority of whom fall within the same age bracket as those earlier generations who were asked to make the ultimate sacrifice. I explore the idea that coming of age in a warming world requires of a young person the capacity/predisposition to "take responsibility for their responsibility" (Biesta 2004) and to play their part in addressing the crisis. In relation to this premise, I consider how our students are currently positioned as consumers in a marketized environment where education is a commodity that they purchase, with the expectation of receiving a return. I conclude – at least in relation to this aspect of our core business (i.e. teaching and learning) – that the Higher Education sector is ill-prepared for the enormity of the task ahead.

Biesta, G. (2004) 'Education, Accountability, and the Ethical Demand: Can the democratic potential of accountability be regained?' *Educational Theory* 54:3 pp. 233-250

Milliband, E. (2019) 'Tackling climate change is like fighting a war we must not lose.' *The Yorkshire Post* 2nd May 2019.

Vare, P. (2019) 'A War for our world: Reframing the climate crisis' *BERA blog: Education for our planet and our future*. Available at: - <https://www.bera.ac.uk/blog-series/education-for-our-planet-and-our-future> (accessed 30th January 2020).

5. "By Their Teachers You Shall Know Them", A Sustainable Perspective of The Teaching Profession, Olatunbosun Emmanuel Ogunseemi, Gbenga Sunday Alonge, College of Education, Ikere-Ekiti, Nigeria [Link](#)

Keywords: Teachers, Readiness, Responsibility, Reflection, Policy, Perspective, Profession

Teaching is not for every tom dick and harry. It must be seen as a fraternity and not a job that is restricted to a lone ranger but that which should be done by a group of people with communal interest. Globally, it is high time teachers began to change the lens with which they see the profession because no education succeeds without the teacher factor. Furthermore, that everything rises and falls on the teacher in every educational process.

Meanwhile, there are good policies on education all over the world but teachers should note that they are to influence policies rather than being influenced by policies. Therefore, this work is a three dimensional perspective discourse of the teaching profession in terms of

- (i) Teacher Readiness
- (ii) Teacher Responsibility
- (iii) Teacher Reflection

Quadrant 3: Slow Resistance

1. Study and the Restoration of Paradise, Simon Wilson, Faculty of Education Postgraduate Programmes, CCCU [Link](#)

This paper proposes that the traditional idea of 'study' (Illich, 1993, p. 14; Wilson, 2020) may offer a conception of education which is truly sustainable and which may indeed ward off ecological catastrophe. At its heart, study is a co-creative practice of love in which knowledge emerges in "an ever closer sympathy of two equals" (Wilson, 2020, p. 128). It engenders a dynamic and mutually transformative relationship between student and their beloved subject, which can spread out into to an intricate web of relations – such as between human persons, and also between humans and the phenomena of the natural world. These reciprocal relations are essentially antinomic, collapsing binary oppositions, such as those in the call for papers (fast/slow, individual/society, etc.) and moving towards a form of knowledge beyond (but inclusive of) discursive reason. In a word, this is education as a process of learning what we love, rather than what we think we need (or indeed desire).

My arguments will draw on some of the mystical, sacramental and ecological teachings of the Eastern Orthodox Church, a tradition which, though little known, is becoming increasingly significant in sustainability and ecological thinking (eg Chryssavgis and Foltz, 2013), and which has at its core the hope of re-establishing Paradise here and now.

References

Chryssavgis, J., and Foltz, B.V. (2013) *Toward an Ecology of Transfiguration: Orthodox Christian Perspectives on Environment, Nature, and Creation*. New York; Fordham University Press.

Florensky, P. (1997) *The Pillar and the Ground of the Truth: An Essay in Orthodox Theodicy in Twelve Letters*. Translated by B. Jakim. Princeton: Princeton University Press.

Illich, I. (1993) *In the Vineyard of the Text: A Commentary to Hugh's Didascalicon*. Chicago: University of Chicago Press.

Wilson, S. (2020) 'Walking into the Heart of the Landscape to Find the Landscape of the Heart', in Armon, J., Scoffham, S., and Armon, C. (eds.) *Prioritizing Sustainability Education: A Comprehensive Approach*. Abingdon: Routledge, pp. 126-140.

2. Energy saving and the climate revolution: A UK-China comparative study of energy literacy, Professor Debby Cotton, Dr Junqing Zhai, and Dr Jennie Winter [Link](#)

The need to address the current trajectory of potentially catastrophic climate change is increasingly urgent, as evidenced by recent news events, most notably in Australia. University leaders are paying greater attention to energy issues and students are seen as important actors in this movement. Arguably, China, as the most populous country in the world and one of the most significant current contributors to climate change, is a key participant in any attempt to reduce energy use worldwide.

This paper reports a study exploring students' energy literacy in the UK and China. Despite the focus on young people in recent climate change protests, findings indicate that neither 'Climate Change' or 'Secure Energy Supply' were the issues of greatest concern to students in the UK or China, rather these were 'Improving educational standards' (China) and 'Reducing inequality' (UK). UK students had higher self-reported energy-saving behaviours than Chinese students and more ecological world-views, but Chinese students had better technical knowledge of energy issues, and much stronger trust in the government to solve energy-related problems. There were thus issues of knowledge, motivation and trust/agency that affected the groups of students differently.

A key conclusion is that patchy understanding of energy issues may act as a brake on the 'climate revolution': fast but ineffective actions are of less use than slower, more thoughtful changes supported by effective sustainability education. Although campus greening is often seen as an easier target than the curriculum, the importance of education as a catalyst for change should not be under-estimated.

3. Pedagogies of relational attention; becoming lost with the world, Dr Sharon Witt, University of Winchester and Dr Helen Clarke [Link](#)

Within our context of Initial Teacher Education (ITE), we see potential for thinking, being and doing 'different' sustainability education. Relational approaches foster connection with the natural world. We propose 'Pedagogies of Attention' that invite students and tutors to respond to the 'urgency of now'. In becoming lost, we move away from the familiar. The current Higher Education (HE) ITE curriculum operates within a reductive ethos, driven by performativity and accountability. In times of global and environmental crises, we seek to resist attempts to tame and simplify learning and teaching. In seeking an alternative path to sustainability education, we embrace a 'more-than' approach to professional wisdom. In slow, playful experimentation we explore the unknown in 'think-practice' (Thiele, 2014: 202), to diffract and write our experiences. We seek to disrupt notions of sustainability education that position students and children in a passive and inert Earth. Knowledge is situated and relational within a sentient more-than-human world (Bird Rose, 2013). Learning is renegotiated in an ongoing, messy, co-construction, with a range of Hampshire places including Winchester, Selborne and the New Forest. We resist the temptation to offer a 'how to' guide for relational practices but, rather, offer provocations inspired by 'Wild Pedagogies' (Jickling et al. 2018) and Common Worlds scholars (Taylor 2017, Merewether, 2018). In this presentation we highlight some inherent tensions in more-than-human sustainability education, illustrated through examples from enchanting encounters which have inspired questions for our practice. Such questions raise 'matters of concern' (Iorio et al. 2017) to which HE should attend, because 'it matters what stories we tell to tell other stories' (Haraway, 2016: 12). We believe in 'a lively world which tells us what we care about, what is happening and what can be done' (Merewether, 2019: 247).

Bird Rose, D. (2013) Val Plumwood's Philosophical Animism: attentive interactions in the sentient world. *Environmental Humanities*, 3, 93-109

Haraway, D. (2016) *Staying with the trouble: Making Kin in the Chthulucene* (Experimental Futures). Durham, North Carolina: Duke University Press

Iorio, J.M., Hamm, C., Parnell, W. and Quintero, E. (2017) Place, matters of concern, and pedagogy: Making impactful connections with our planet. *Journal of Early Childhood Teacher Education*, 38 (2), 121-135

Jickling, B., Blenkinsop, S., Timmerman, N. and de Danaan Sirka-Sage, M. (Eds.) (2018) *Wild Pedagogies: Touchstones for Re-negotiating Education and the Environment in the Anthropocene*. London: Palgrave Macmillan

Merewether, J. (2019) Listening with young children: enchanted animism of trees, rocks, clouds (and other things)). *Pedagogy, Culture and Society*, 27(2), 233-250

Taylor, A. (2017) Beyond Stewardship: common world pedagogies for the Anthropocene, *Environmental Education Research*, DOI: 10.1080/13504622.2017.1325452

Thiele, K. (2014) Ethos of Diffraction: New Paradigms for a (Post) humanist Ethics. *Parallax*, 20

4. Sustainable Education? A Marxian consideration of the value of education, Alan Bainbridge, CCCU [Link](#)

If formal education structures are viewed through a Marxian lens it soon becomes clear that the unsustainable impact of humans on the 'more than human' is the result of capitalist entrapment. It will be argued that the initial

motive to educate can be understood as an ancient human ecological response to reduce an 'adaptive-lag' between the human and more than human world. Paradoxically, this urge to educate has only served to further alienate the human from the more than human world and in doing so, decreases the likelihood of a sustainable planet.

The negative impact of human activity has been known for as long as history allows us to: the epic tale of Gilgamesh, koranic and biblical texts all make clear the potential humans have to destroy the world in which they live. The difficult question to answer is: 'Why, if this has been known for so long, do humans still persist in digging their own graves?' It is to Marx that I shall turn to make sense of the nonsensical.

Drawing on industrial practices, reported by mainly English factory inspectors and reports of soil degradation, Marx questions the relationship between the value of worker's labour and the impulse for the capitalist to make and accumulate wealth. I shall use Marx's discussion of use and exchange value to show how education has become snared in the mire of capitalist productivity and in doing so, hides from awareness the possibility of educationally induced planetary destruction.

5. Plant blindness - what it is, why it's at the heart of the climate and sustainability crisis, and what we need to do about it, Howard Thomas, IBERS, Aberystwyth University, Wales; Helen Ougham and Dawn Sanders, IDPP, Götesborgs Universitet, Sweden [Link](#)

The term "plant blindness" was introduced in 1999 by the botanists and educators James H Wandersee and Elisabeth E Schussler to describe what they saw as a pervasive insensitivity to the green environment and a general neglect of plants on the part of biology education and especially amongst American students. From feeding a hungry world to sequestering atmospheric carbon, from managing fire and flood risks to sustaining biodiversity, from giving rural populations and subsistence communities a living to making the urban environment bearable, we need plants. In particular, we need to be mindful of plants and understand their foundational status in the great cycles of material and energy that make Earth habitable. And yet plants seem to have become largely redacted from awareness of the biological history of the planet. For example, the last Botany degree in British Universities ended in 2010. Plants hardly figure at all in school biology curricula. The present political arms race to be the party that pledges to plant a million, or even a billion, trees shows a shocking ignorance of vegetation ecosystems and how they work in relation to time. In this presentation we describe how, led by educators and researchers with interdisciplinary outlooks, a worldwide movement is working to address the issue of plant blindness; but the socio-political forces of resistance are formidable.

Further reading.

Sanders D (ed). 2019. Plant blindness. *Plants People Planet* (special issue) 1 (3).

<https://nph.onlinelibrary.wiley.com/toc/25722611/2019/1/3>

6. Pedagogies of risk and strangeness in the Faculty of Arts and Humanities: supporting student sense of belonging and success Kath Abiker, University Strategic lead for Student Retention, Inclusion and Success, CCCU [Link](#)

Designing and delivering arts programmes with an ecological focus to curriculums of risk and strangeness as outlined by Barnett in his book *The Ecological University*, may be one of the most needed curriculum transformation strategies to support students to 'life wide learning' as we move through the 21st century within a 'finished and unfinished curriculum space'.

This paper presents Barnett's utopian vision of a refreshed curriculum which responds to student needs and identities as 'nomadic' and points to ways the university can foster the ecology of belonging and success. He

directs our horizons towards higher education philosophies which move away from notions such as massified and marketised.

Three pedagogic case studies will be explored that connect to Barnett's across a range of subjects and methodologies connected to:

- where technology is used to enhance learning through reflection in the use of PebblePad
- curriculum content is updated to reflect contemporary themes in theatre around precarity
- an international visit to a gaming convention in Berlin

The evolution of knowledge, skills and attributes through ideas and experiences (which are scary for students) as a result of the above learning and teaching interventions, will be evaluated and the impact of these curriculum enhancements will be critically explored.

The context of retention and success and some of the more uncomfortable truths facing the university today connected to quality agendas which may have 'tempered' the curriculum and made it more docile will also be factored in.

Barnett's text scopes out hybridity and new relationships between the university, the curriculum, humanity and the world and points towards the kind of university we 'might be' as a strategy to support the 'vulnerability' of the university and some of our challenges.

The emphasis of his fresh conceptions of the university will be highlighted in relation to the cases in point and the paper aspires to begin to ask the question- are they beneficial for us as a Faculty community and for our curriculum?

This paper will be useful to anyone who is in the process of designing or refreshing curriculums or who is looking for ways to increase sense of belonging within the curriculum.

7. The importance of creating safe spaces for the heart in relation to sustainability issues, Louise Livingstone, Canterbury Christ Church University [Link](#)

In recent years, growing concerns in relation to global challenges have served to bring sustainability under the spotlight (de Witt, 2016). Additionally, the implementation of sustainability-related topics in higher education appears to be a global trend. Yet, could there be a danger of educating people to approach sustainability through the same mode of awareness that may have contributed to the issues that global society now faces? Within sustainability circles, increasing numbers of scholars are referring to the importance of engaging both heart and mind in conversations. However, this paper demonstrates how knowledge as generated through the heart has been rendered subservient to knowledge generated through the brain through a dominant, medical narrative (Bound Alberti, 2010). In contemporary society, the heart is only allowed to live as a biological organ, reduced to mere metaphor and a symbol of sentimentality. In this sense, the heart's way of knowing can never be legitimately discussed or implemented. By showing how contemporary thought has such difficulty with the heart and heart-related terms, this paper aims to create a safe space for the heart and consequently demonstrate its centrality in engaging with sustainability.

8. #futuregen: lessons from a small country. Dr Jane Davidson, PVC Emeritus at the University of Wales Trinity Saint David. [Link](#)

On June 4th this year, Chelsea Green will be publishing *#futuregen: lessons from a small country*. <https://www.chelseagreen.com/product/futuregenerations-lessons-from-a-small-country/> In *#futuregen*, its author, Dr Jane Davidson (PVC Emeritus at the University of Wales Trinity Saint David) explains how, as Minister for Environment, Sustainability and Housing in Wales, she proposed what became the Well-being of Future

Generations (Wales) Act 2015 — the first piece of legislation to place regenerative and sustainable practice at the heart of government. The Act connects social, environmental, economic and cultural well-being and looks to solve complex issues through better decision-making. In the book, Davidson reveals how and why such ground-breaking legislation was forged in Wales — once reliant on its coal, iron and steel industries — and explores how the shift from traditional economic growth to a more sustainable future is creating new opportunities for communities and governments all over the world. In the conference session, Davidson will talk about the difficulties of delivering institutional change, and how that can be addressed using Prof Donella Meadows 5 tools from 'Limits to Growth': Visioning, Networking, Truthtelling, Learning, Loving.

9. Dancing with Organisational Systems: Permaculture principles for sustainability in higher education, Dr Andrew Reeves, De Montfort University [Link](#)

The Higher Education (HE) sector is increasingly aligning its activities with the sustainable development agenda. This alignment comes at a time when many sustainability issues, such as climate change and the protection of democratic institutions in open societies, are presenting urgent and far-reaching challenges globally. For HE sustainability practitioners, this presents strategic and tactical challenges about reconciling potentially rapid and disruptive changes with 'unsustainable' HE agendas and slow-moving internal change processes. In this context, what could help practitioners and their institutions to make wise choices on actions?

This paper explores the proposal that wise action in this domain is grounded in three key factors: an ethically-based and ecologically defined vision of sustainability; an experience-based systemic understanding of an organisation and its context; and a repertoire of change strategies grounded in how socio-ecological systems evolve. Permaculture design thinking offers a long-established and clearly articulated set of ideas that meet these criteria, with the design principles put forward by Mollison and Slay (1991) and Holmgren (2002) offering specific guidance to inform short-term decision making and longer-term planned action.

The paper draws upon case study examples of sustainability-related actions by university actors reported in the public domain in the last year as either to illustrate the potential function of these principles to both understand and enhance wise action by HE practitioners. The paper concludes by translating these generic principles into a set of principles specifically designed around promoting sustainability in the HE sector.

10. The Civic University in the Compassionate City, Dr Alex Cahill, University of Plymouth [Link](#)

Recently, the University of Plymouth made the decision to label itself a 'civic university'. Across town, St Luke's Hospice is working hard to make Plymouth a Compassionate City based on the research of Allan Kellehear (2005). This paper presentation asks, 'Are we willing to be a civic university? And what type of 'civic' do we want to be within the community?' The presentation will analyze Cahill's partnership with St Luke's Hospice and how this partnership embedded sustainability into the curriculum by entrenching university students in the local community through an applied practices module. The approach focuses on working with St Luke's Hospice to build a more compassionate city through the method of forum theatre and seeks to discuss the civic duty and engagement of the university (both its academics and its students). Cahill argues that drivers such as employability and student experience should not be resisted when discussing sustainability within higher education, only reimagined, and that we can use the 'dominant ideological' (Barnett 2018) stones thrown at the idea of community-based learning as foundation to rebuild the structure of the university institution. Through individuals we spark societal change and through fast alignment, we create slow (but monumental) resistance.

11. Exploring and evaluating the impact of education for sustainability using the Eden Project as a case study, Rebecca Upton, Global Sustainability Institute, Anglia Ruskin University. [Link](#)

Humanity lives amid this turbulent time in which and education needs to respond to the ecological crisis of humanities relationship to the natural world. Sterling (2010) stated that education for sustainability is a gateway for transformative change. Therefore, education for sustainability could be seen as a route to a transformative learning experience and could lead to a sustainable planet. Ultimately, the research aims to develop a framework that will be globally transferable to other charities/businesses/social enterprises.

METHOD

For this research project, I will be using The Eden Project as a case study for an autoethnographic investigation.

RESEARCH QUESTIONS

Research Question 1:

What part does informal education centres have in creating a sustainable future? How are the outcomes and impacts currently measured and reported and what gaps are present in practise?

Research Question 2:

What contributions to EfS does the Eden Project aspire to and how does it contribute to improving sustainability practices both implicitly and explicitly?

Research Question 3:

What are the observed and reported experiences of those who engage with informal sustainability education? What impacts do they feel these experiences have on them?

Research Question 4:

What is the fit between what Eden is aspiring to and what visitors are receiving? How can we create a better fit through a framework to measure the (non-economic) impact of informal sustainability education to enable organisations to meet aspirations in this field?

12. ESD as an immersive educational experience. What did you see? An exercise in transdisciplinary education, Alison Greig Alison, Tim Foreman, Dai Morgan, Davide Natalini Noble et al, Anglia Ruskin. [Link](#)

Every sustainability educator must deal with the fact that, as Meadows (1982: p101) observes “The world is a complex, interconnected, finite, ecological-social-psychological-economic system.” She goes on to attribute “Our persistent, intractable global problems” to the fact that we instead treat it as “if it were divisible, separable, simple, and infinite”. A higher education system, which uses disciplines as its frames of reference, methodological and theoretical canons is therefore a particular challenge.

Here we report on a learning activity designed to address these challenges, by bringing together students from Cambridge University’s MPhil in Engineering for Sustainable Development with students from Anglia Ruskin University’s MSc Sustainability. It was practical in two senses, firstly providing the opportunity of being present and attuned to the context of a given system through careful observation, something not possible through paper-based exercises or online. It also acknowledges that our ability to observe and identify salient features and relationships in real world settings provides the foundational understanding on which system models are based. Secondly, it becomes a practical experience of interdisciplinary, where students from different disciplines observing the same features in different ways and then negotiating how this will be represented in a common systems diagram. Thirdly through (i) and (ii) there becomes a discussion of the phenomenon of emergence.

Within the paradox model it is both fast and slow, potentially changing students’ perspectives within a few hours, whilst at an institutional level providing a case study of what is possible as we press for re-alignment of the behemoth that is higher education.

13. Stepping Toward a Sense of Place: A Choreography of Natural and Social Science, Dr. Michael-Anne Noble Ph.D., Dr. Hilary Leighton Ph.D., Dr. Ann Dale Ph.D. School of Environment and Sustainability Royal Roads University, Victoria, Canada [Link](#)

Keywords: education, sense of place, environment, curriculum design, integrated, natural science, social science

The development of a sense of place and an individual's sense of belonging to place(s) is one way to respond to two of modern society's greatest challenges—climate pollution, and biodiversity conservation. Recent reports provide alarming statistics about the need to act now (IPCC, 2018 and IPBES, 2019) and the potential of catastrophic losses. We argue that a primary motive of "relatedness" implies an indissoluble unity of people and place and is a necessary educational lens for the messy, wicked problems now facing society.

We address prevailing dualisms between humans-nature, and subject-object as we design and deliver curriculum with an integrative, collaboration 'both-and' approach when natural and social sciences step together toward developing a sense of place and enhanced place connection. With space in the curriculum for both linear rationality and objectivity in the lab as well as responsive and imaginative ways of participating out on the land, means students begin to look *into* rather than merely *at* the environment. Moving from nature as backdrop to co-implicating themselves in a continual process of *being in place* for positive change, students deepen their sense of respons(ability) and connection

Through the development of critical knowledges and practices related to ecosystem structure, function and sustainability, we suggest curricular designs that invite students to step into experiential space with enough time to develop an affective connection and greater conscious awareness of their sense of place with its positive implications for sustainability. Live cases and design examples from Royal Roads University illuminate how natural and social science when choreographed into the curriculum together are each critical to the development of curriculum integrating sense of place, for ecological and human health and sustainability, and may hold important keys to unlocking our ability to implement sustainability

14. Adult SEN trauma is still painful..., Thomas Delahunt MSC FHEA, CCCU [Link](#)

I want to start the process of the unlearning. This current space we occupy as a socially distanced community is unparalleled. It allows us time to think and unlearn.

I am an alternative creative that loves the transcendental phenomenological approach.

The awards have recognised something but i feel that it only places a validity stamp on top of an organic community. The poetic nursing heart is a community of people looking to have difference valued.

The blogs and symposiums are going to develop into a shared space and the unlearning is being taken into a thesis supported by Dr Sam Vale and Dr Johnathan Barnes.

So I hope I can introduce and invite responses that can be structured into a virtual poem based on the ideas associated with sustainability. Is this a chance as many leaders are suggesting for a green response? Or is it just going to be another post truth swept up into the reality of our materialist addiction?

#iidentifyasapoet

#dyslexicacademic

Quadrant 4: Slow Alignment

1. **Evolving Graphic Design Curriculum – Responsible Design for a Digital Shift**, John Hudson: Course Leader *Graphic Design, Staffordshire University.* [Link](#)

Introduction

Evolving Graphic Design curriculum to embed the issues surrounding Sustainability, Ethics and Corporate Social Responsibility, will enable the next generation of ‘Digital’ Designers to be more responsible within their working ethos and practice.

Focus

My session will discuss teaching and learning innovations introduced into Graphic Design curriculum to embed ‘good design’ practice. I will share my current PhD research into the ‘Effects of User Interface Design (UI) on the Human Lived Experience’. This research will discuss how the shift to an increasingly digital practice, has created new challenges and questions for the design educator.

Context

Graphic Design practice is becoming more digital. What was once a predominantly ‘tangible’ artefact-based discipline of designing ‘things’; books, packaging, etc, is an increasingly screen-based practice. To reflect this digital shift, students require new skills and understanding of how to practice more responsibly and sustainably within a digital context.

As we speed into a screen-based world of User Interface Design (UI) we have no concrete evidence on the long-term effects of using ‘habit forming’ products. What will be the societal, environmental and human side effects of using these products? There is currently no regulation, or sustainable code of conduct in relation to UI design, even though over 205 billion APPS will be downloaded this year and the UK average individual screen time is approx’ 3hrs 23mins a day – 50 days a year.

This provides a new set of problems and issues for the designer and educator when trying to inculcate responsible design practice.

2. **Sustainability in the workplace and the theory of planned behaviour: Norms and identity predict environmentally friendly intentions**, Dennis Nigbur¹, Ana Fernández¹, Sharon Coen², Anke Franz¹ & Ian Hocking¹ [Link](#)

1 Canterbury Christ Church University, 2 Salford University

Social psychology offers an insightful perspective on the psychological processes underlying sustainability-related intentions and actions, at universities and elsewhere. Ajzen’s theory of planned behaviour (TPB) is a well-supported model, positing that attitudes alone will rarely predict intentions and behaviour accurately. Rather, individuals are sensitive to social norms (the perceived requirements of a setting and/or a group to which the actor belongs) and perceived control (the sense that the actor is capable of the behaviour and the environment offers the opportunity). Recently, it has been suggested to include self-identity (the notion that the behaviour is part of who you are). This paper summarises previous research linking the TPB to sustainability, and then reports a quantitative survey of 130 staff members at Canterbury Christ Church University. An online questionnaire measured attitudes, social norms, perceived control, self-identity, and intentions relating to office waste recycling, energy saving, and transport choice. Overall, only self-identity and norms reliably predicted intentions to act in environmentally sustainable ways. Follow-up analyses suggest that different predictors were significant for different intentions, but self-identity always improved prediction over and above the original TPB variables. In

conclusion, universities can best cultivate sustainability intentions by promoting favourable norms and self-identities.

3. The ‘multiplier effect’: Embedding the SDGs for transformational sustainable education. *Michel Mason, EAP Tutor, University of Essex; Dimitri Lera, Lecturer in Hospitality, University of Essex* [Link](#)

In 1987 UNESCO-UNEP called for a ‘multiplier effect’ whereby teachers were trained to draw upon global issues to empower future generations to be politically critical and personally transformative; actively involved in societal transformation. Almost thirty years on, the 2030 Agenda for Sustainable Development (2015) through SDG4 Quality Education Target 7 explicitly recognises the need for education for sustainable development and global citizenship. The University of Essex as a signatory to the Higher Education Sustainability Initiative (HESI) partnership has agreed to obligations to teach, and encourage research and dissemination of sustainable development knowledge across all disciplines of study. As Walsh (2016) says ‘The UN 2030 Sustainable Development agenda is a moral compass for the 21st century’.

This paper explores two pilot cases which have embedded SDGs into curricula: a vocational Hospitality course with a focus on the environment; and a cross-disciplinary EAP programme incorporating social and economic SDGs. It will begin by addressing the alignment of the definition of sustainability with the environment before examining the challenges faced with broadening that definition in curricula design. We will then reflect on the benefits of collaborative working relationships with subject specialists and the transformative potential of SDG embedded courses. Finally, we consider the value of adopting our slow alignment approach at curriculum level as the initiator of change. We conclude that to achieve a truly transformative educational experience, an institutional model of integration of the SDGs across university curricula is fundamental.

4. Engineers and Social Responsibility: Real World Experiences as a Catalyst to Learning, *Dr Mike Clifford, Faculty of Engineering, University of Nottingham, UK (presenting author); Dr Subarna Sivapalan, Associate, School of Education, University of Nottingham, UK / Centre for Social Transformation for Sustainable Lifestyles, PETRONAS University of Technology, Malaysia* [Link](#)

In the present Anthropocene era we live in, humans have been identified as the biggest threat to the environment and planet. Our actions have caused the acceleration of climate change and loss of biodiversity, prompted by rapid and irresponsible development. Engineers play a critical role in a nation’s development, but sometimes lack the much-needed sustainability competences and literacies to envision the potential environmental and socio-economic challenges that come into play with such development activities. Sustainable development competence is a key graduate outcome for engineering programmes in UK and Malaysia. Ironically, graduates are unable to effectively showcase environmental and socio-economic knowledge, competences and values in the workplace, due to a lack of prior exposure from the curriculum. Drawing upon and comparing our experiences in infusing elements of sustainable development within undergraduate engineering T&L in UK and Malaysia, this paper discusses the potential of introducing strategies such as storytelling and service learning (where students work towards developing and executing sustainable solutions for real issues faced by real communities) as a means to nurturing future engineers who are more environmentally and social responsible to the planet and people.

5. Five year review of Responsible Futures, *Dr Georgina Gough, Programme Leader MSc Sustainable Development in Practice, University of the West of England, Frenchay Campus, Bristol* [Link](#)

In 2014/15, the National Union of Students (NUS) developed an accreditation scheme for education for sustainable development (ESD) called Responsible Futures. The vision for the scheme was the promotion of whole-institution approaches to environmental sustainability and social responsibility, spanning the formal and informal curriculum, applicable to both further and higher education. The scheme works within the existing

structures of higher education institutions (HEIs) and is framed a long-term process of development and improvement in ESD activity and 'performance' and is thus situated firmly in the 'slow alignment' quadrant of the proposed conference model.

This paper/session will present findings to date of a **review of the first 5 years of Responsible Futures**, considering experiences of HEIs and their students' unions and impact on the sector. This review has been designed in conjunction with the NUS (now Students Organising for Sustainability -SOS). Survey work will already have been undertaken prior to the conference. However, participants at the SHE Conference will be invited to explore ways by which a review of the Responsible Futures scheme might be undertaken in such a way as to enable it to influence more rapid change within the sector, if not to encourage change of the more problematic structures and processes with UK HE. Participants will be able to input into the final stages of review of the first five years, as well as to contribute to the forward-looking proposals for enhancement of the scheme.

6. *Should 'the fierce urgency of now' ignore the dead? A paradox of education for sustainable futures.*

Peter Vujakovic (School of Human and Life Science), Lesley Hardy and Ellie Williams (School of Humanities) Canterbury Christ Church University, UK. [Link](#)

The classic Brundtland definition of sustainability focuses on the present and future generations. This paper explores the value of the missing generations, the dead. The paper explores how recognition of the dead and their disposal provide a novel take on education for sustainable futures. Urban burial grounds and cemeteries, for example, are excellent examples of 'green heritage' sites that can be exploited for sustainability education through direct engagement, while reference to research on the very difficult issues related to disposal of the dead in less developed economies can raise stark issues related to rapid urbanisation and land use, poverty and economy.

Often representing encapsulated countryside in the UK, the history and current condition of burial grounds provide ample resources for direct, hands-on education. The modern cemetery, for instance, is essentially a product of the massive population growth associated with industrialisation in Britain in the nineteenth century. Many were planned with hygiene in mind (as urban churchyards became noxious places), but also as pleasure grounds or arboreta. In many cases neglect has wrought other observable changes, dilapidation of chapels and tombs, but also novel ecologies through 'invasion' by organisms, some positive and some destructive.

This paper explores the use of burial grounds for sustainability education in areas as diverse as ecology, social, economic and cultural geography, drawing on experience at Canterbury Christ Church University. Examples include work undertaken within the Canterbury UNESCO World Heritage Site. Burial grounds and related matters (cremation) provide ample opportunity for exploring core issues of sustainability.

Workshops

1. Coming Back to Life – An Invitation to Experience The Work That Reconnects. Dr. Hilary Leighton, School of Environment and Sustainability, Royal Roads University, Victoria, BC, Canada [Link](#)

We live in an extraordinary time on Earth where human activity is forever altering ecosystem functioning and disrupting large-scale ecological cycles. At present, in meeting our current (and near future) human levels of consumption, we will ensure the collapse of biological, ecological, economic and social systems. Our particular *way of being human* has become a planet-shaping force as we have – at our own peril - alienated ourselves from nature and the co-creative capacities of the more-than-human world. In 1993, author Neil Evernden wrote, “We are not *in* an environmental crisis, but *are* the environmental crisis” (p. 134). What if this dark and difficult time is not the end but our greatest invitation to more fully *participate* rather than turn away or try to solve or fix a set of problems with the same thinking that created them? Ecophilosopher, Buddhist and teacher, Joanna Macy proposes we are experiencing a *crisis of perception* fed by our privileging linear rationality and empirical verifiability, our disconnection from nature (and our own natures), and a lack of deep identification with all other life that holds potent emotional connections through those subjective experiences.

To bring ourselves into co-implication with the living world, we need modalities that expand our conceptualizations of what it means to be fully human in relationship with a world that is more relative than resource, to become participants in its renewal and restoration. To evoke the imagination and welcome all feelings (fear, anger, grief and despair as well as joy and love), intuition and a wide range of expression means we become more compassionate, cooperative and generative by nature with the necessary energy and collective will to engage in co-creative processes. The invitation at the heart of this workshop is to look *into* rather than *at*, think *with* rather than merely *about* nature and our place in it. Designed with nature’s self-generative dynamic in mind, arts and nature-based practices will guide us to experience afresh our interdependence within the web of life in which we co-exist. Open to the vast and creative intelligence of life’s self-organizing powers as we clear a space to pay attention, to deeply listen to the world, and to (re)member our natural inheritance as we step (literally) toward a more ecological approach to life with implications for future contributive action.

In an interdisciplinary space between humans and the more-than-human world, between feeling and thinking, between body and soul, where the domesticated and wild intermingle and exchange themselves freely and radically, we will take up an informal, ‘lived’, ecological and ensouled approach to becoming eco-pedagogical, intra-agents (Barad, 2007). Within the thrall of relationship and reciprocity and in keeping with our own earthy roots, it will be out on the fertile ‘soils’ of the university grounds with sweet time enough to blossom in our own wildly, original ways, that we find ourselves coming back to life.

What we will look into:

- Your ecological identity – picking up on early threads of participation and belonging
- Natural mirrors, unexpected teachers, reflective awareness of wild intelligence
- Cultivating your moral imagination to have the largest conversation you can with the world
- (Re)searching the implications of what it means to more fully participate for maturation, connection and contribution

Return with vivid experiences to draw upon and activities to take directly back to your community and your work. Art supplies and hand-outs will be provided. Journals and weather-ready clothing please.

REFERENCES

Abram, D. (1996). *The spell of the sensuous: Perception and language in a more-than-human world*. New York: Vintage Books.

Barad, K. (2007). *Meeting the universe halfway: Quantum physics and the entanglement of matter and meaning*. Durham, NC: Duke University Press.

Evernden, N. (1993). *The natural alien: Humankind and environment*. Toronto, ON: University of Toronto Press.

Macy, J. & Brown, M. (1998). *Coming back to life. Practices to reconnect our lives, our world*. Gabriola Is., BC: New Society Publishers.

BIO

A lifelong apprentice to nature and psyche, educator and eco-psychotherapist, Dr. Hilary Leighton, Associate Professor in the School of Environment and Sustainability at Royal Roads University, draws from embodied, nature-based practices to reflect the ethical dilemma, suffering, and loss of our relationships with wildness, to re-embrace learning as an initiation toward wholeness and a deeper, more soulful way of belonging to the world. For the past 15 years, under the excellent tutelage of Dr. Joanna Macy, Dr. Leighton has been a close study of and facilitator for *The Work That Reconnects* for undergraduate and graduate students and in public education.

2. New guidance for Sustainability Education in HE in the face of the climate emergency. *Paul Warwick, Centre for Sustainable Futures Lead, University of Plymouth; Carolyn Hayles, Cardiff Metropolitan University.*
[Link](#)

This workshop seeks to engage participants with plans to create new guidance on Sustainability Education in UK Higher Education that are being written by the QAA and Advance HE.

This guidance aims to replace that previously issued in June 2014 by the QAA and HEA titled 'Education for sustainable development: Guidance for UK Higher education providers'. This is in recognition that the world has significantly changed since 2014, particularly with regard to societal and young people's responses to the climate emergency and the global initiative of the United Nations Sustainable Development Goals.

This workshop will explore how the new guidance might seek to navigate the very paradoxical challenges that forms the central theme of this conference. In that it needs to articulate the urgency of the situation at a strategic and policy level whilst recognising how slow such sustainable leadership change can sometimes be. It needs to also support pro-active moves that challenge and change the very structures Sustainability Education is currently operating within whilst being wise to other agendas that leaders of HEIs could be seeking to navigate and give their attention to, particularly in the light of our new COVID-19 reality.

As a consequence, this workshop will offer small group discussion opportunities for participants to consider the apt content of this new ESD guidance document in the light of central themes that have emerged from our SHE conference time together.

Before this workshop participants may find it helpful to familiarise themselves with the existing ESD guidance for UK HE providers at:

https://www.qaa.ac.uk/docs/qaa/quality-code/education-sustainable-development-guidance-june-14.pdf?sfvrsn=1c46f981_8

Contact details for presenters

1. Kathleen Anne Abiker
Academic Strategic Lead for Student Retention, Inclusion and Success (SFHEA)
Canterbury Christ Church University
kath.abiker@canterbury.ac.uk
2. Zulfi Ali
Faculty of Education
zulfi.ali@canterbury.ac.uk
3. Darren Axe
Development Manager (Environmental Sustainability)
Lancaster University Students' Union
d.axe@lancaster.ac.uk
4. Dr Alan Bainbridge
Senior Lecturer
Faculty of Education
Canterbury Christ Church University
a.bainbridge@canterbury.ac.uk
5. Helen Bowstead
Academic Manager for English Language Development
University of Plymouth
helen.bowstead@plymouth.ac.uk
6. Dr Alex Cahill
Programme Lead, BA Directing and BA Drama and Theatre Practice
University of Plymouth
Alex.cahill@plymouth.ac.uk
7. Dr Helen Clarke
@Attention2Place
helencarkewin@gmail.com
8. Jason Clarke
Head of Sustainability
City, University of London
Jason.clarke.1@city.ac.uk
9. Dr Mike Clifford
Associate Professor, Faculty of Engineering
University of Nottingham
mike.clifford@nottingham.ac.uk

10. Professor Debby Cotton
Director of Academic Practice
Plymouth Marjon University
dcotton@marjon.ac.uk
Twitter: @ProfDCotton

11. Dr Jane Davidson
Pro Is-Ganghellor/Vice-Chancellor Emeritus
University of Wales, Trinity St David
jane.davidson@uwtsd.ac.uk
<https://www.janedavidson.wales>

12. Thomas Delahunt
MSC FHEA
Canterbury Christ Church University
tom.delahunt@canterbury.ac.uk
#IIdentifyAsAPoet

13. Professor Angela Druckman
Lead for Sustainability in the Curriculum
University of Surrey
a.druckman@surrey.ac.uk

14. Dr Georgina Gough
Associate Professor in Education for Sustainable Development
UWE Bristol
Georgina.Gough@uwe.ac.uk

15. Dr Alison Greig PhD, BSc, PGCert, NTF, PFHEA, C.Wem, C.Env.
Director of Education for Sustainability
Global Sustainability Institute
Faculty of Science and Engineering
Anglia Ruskin University
alison.greig@aru.ac.uk

16. Peter Harper
Natural Sciences
University of Bath
peter@peterharper.org

17. Dr Carolyn Hayles
Environmental and Sustainability Design for the Built Environment
Cardiff School of Art and Design
Cardiff Metropolitan University
CSHayles@cardiffmet.ac.uk

18. John Hudson
Course Leader Graphic Design / PhD student
Staffordshire University
j.t.hudson@staffs.ac.uk
johnhudson.online
@birdysong
19. Professor Karen Jones
School of History
University of Kent
k.r.jones@kent.ac.uk
20. Dr Nicola Kemp
Programme Director
MA in Early Childhood Education
ESD Lead
Canterbury Christ Church University
nicola.kemp@canterbury.ac.uk
21. Dr. Hilary Leighton
Associate Professor, Registered Clinical Counsellor
School of Environment and Sustainability, Royal Roads University
Victoria, BC, Canada
Hilary.leighton@royalroads.ca
22. Dimitri Lera
Hotel Management / Sustainable Hospitality
Edge Hotel School / University of Essex
ldimitr@essex.ac.uk
23. Louise Livingstone
Final Year PhD Researcher - Canterbury Christ Church University
Founder - Heart Sense Research Institute
louiselivingstone@heartsensereseach.co.uk
24. Michel Mason FHEA
Academic Skills Tutor & PhD Researcher in ESD in English Language Teaching
University of Essex
mmasonb@essex.ac.uk
25. Dr Dennis Nigbur
Senior Lecturer in Psychology
Chair of the Faculty Ethics Panel
School of Psychology, Politics, and Sociology Canterbury Christ Church University Canterbury, Kent
CT1 1QU United Kingdom.
dennis.nigbur@canterbury.ac.uk

26. Dr. Olatunbosun E. Ogunseemi
Department of Curriculum Studies and Instructions
College of Education, Ikere-Ekiti, Nigeria
ogunseemi.olatunbosun@coeikere.edu.ng
27. Dr Helen Ougham FLSW FLS
Emeritus Reader
IBERS
Aberystwyth University
SY23 3DA
hjo@aber.ac.uk
28. Dr Alan Pagden
Senior Lecturer
Faculty of Education
Canterbury Christ church University
alan.pagden@canterbury.ac.uk
29. Dr John Parry
Senior Teaching Fellow
School of Education and Social Work
University of Sussex
jmparry@btinternet.com
30. Dr Stephen Peake
Senior Lecturer in Environment
The Open University
stephen.peake@open.ac.uk
@StephenRPeake
31. Dr Chris Preist
Professor of Sustainability and Computer Systems
University of Bristol
chris.preist@bristol.ac.uk
32. Dr Andrew Reeves
Education for Sustainable Development Lead
De Montfort University
areeves@dmu.ac.uk
33. Dr William Rowlandson
Senior Lecture in Hispanic Studies at the University of Kent.
Department Sustainability Champion
UCU Branch Environment Rep
w.rowlandson@kent.ac.uk
34. Dr Dawn Sanders FLS
Associate Professor, Faculty of Education
University of Gothenburg, Sweden
dawn.sanders@gu.se

35. Dr Stephen Scoffham
Visiting Reader in Sustainability and Education
Canterbury Christ Church University, UK
s.scoffham848@canterbury.ac.uk
36. Professor Emeritus Howard Thomas FLSW FLS
IBERS
Aberystwyth University
SY23 3DA
hot@aber.ac.uk
37. Rebecca Upton
PhD Researcher
Global Sustainability Institute
Anglia Ruskin University
rebecca.upton@pgr.anglia.ac.uk
38. Peter Vujakovic,
Professor of Geography
Senior Fellow, Higher Education Academy
School of Human and Life Sciences
Canterbury Christ Church University
Chair, Biodiversity Working Group (CCCU)
Associate Editor, The Cartographic Journal, <http://www.maneyonline.com/loi/caj>
peter.vujakovic@canterbury.ac.uk
39. Paul Warwick
Associate Professor Sustainable Education
Centre for Sustainable Futures Lead
Institute of Education
University of Plymouth
paul.warwick@plymouth.ac.uk
40. Tansy Watts
PhD student researching Holistic Perspectives on the Influential Relations between Young Children,
Adults and Natural Environments.
Canterbury Christchurch University.
t.j.watts215@canterbury.ac.uk
41. Dr Simon Wilson
Faculty of Education Postgraduate Programmes
Canterbury Christ Church University
simon.wilson@canterbury.ac.uk
42. Dr Sharon Witt
Senior Fellow In Learning and Teaching University of Winchester
Sharon.Witt@winchester.ac.uk

Guidance for submitting papers to the IJSHE Special issue: “Navigating Paradoxes in Sustainability Education”.

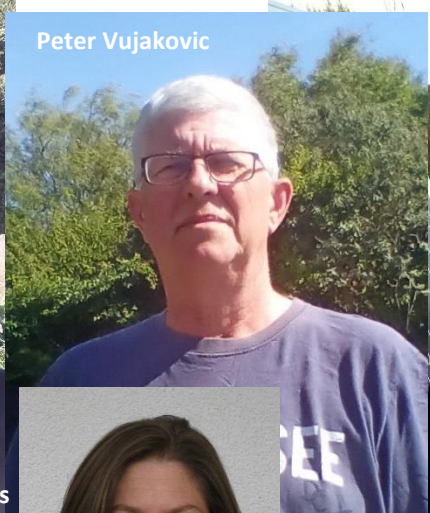
We would like to invite papers’ authors to submit their manuscript to the special issue of the International Journal of Sustainability in Higher Education, IJSHE, “Navigating Paradoxes in Sustainability Education”. The special issue should consist of approximately 11-15 articles, each 4000-6000 words long. This includes all text, references and appendices.

Authors are encouraged to think about where their own work fits in relation to the Paradox Model proposed, and each paper will act as an example of the model in practice.

- Deadline for submission **30th of August 2020**, for publication in Volume 22 Issue 5, spring 2021.
- All content must be submitted, accepted and reviewed through the ScholarOne system. Emerald will be unable to publish journal content which has not been managed through ScholarOne. Here is the link to the IJSHE ScholarOne page:
<https://mc.manuscriptcentral.com/ijshe>
- Papers will be peer reviewed, with editorial decisions made purely on the merit of the paper and on how it engages with the Paradox model discussion.
- International Journal of Sustainability in Higher Education
<https://www.emeraldgrouppublishing.com/ijshe.htm>; see journal author guidelines [here](#)



Carolyn Hayles



Peter Vujakovic



Helen Ougham and Howard Thomas



Georgina Gough



Andrew Reeves



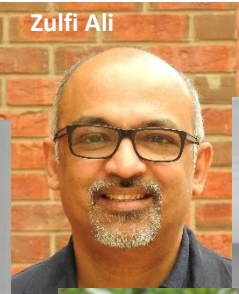
Darren Axe



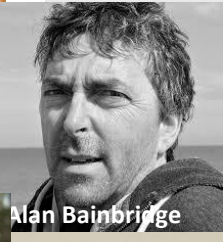
Simon Wilson



Sharon Witt



Zulfi Ali



Alan Bainbridge



Stephen Peake



Mike Clifford



Paul Warwick



Helen Bowstead



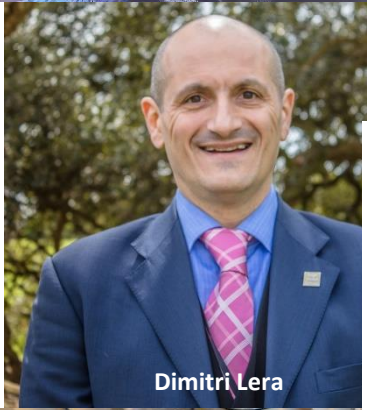
John Hudson



Jason Clarke



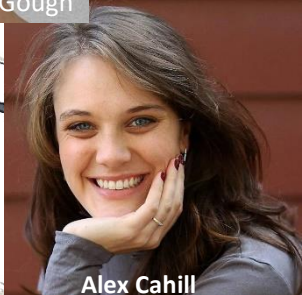
Dawn Sanders



Dimitri Lera



Tom Delahunt



Alex Cahill



Jane Davidson



Olatunbosun Ogunseemi



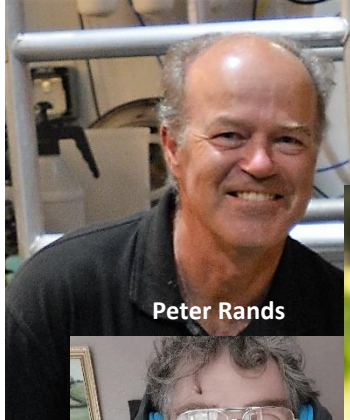
Michel Mason



Alan Pagden



Louise Livingstone



Peter Rands



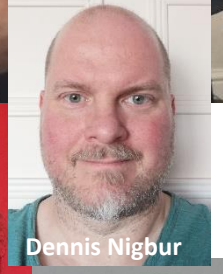
Rebecca Upton



John Parry



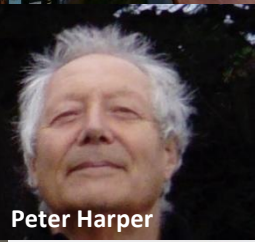
Stephen Scoffham



Dennis Nigbur



Karen Jones



Peter Harper



William Rowlandson



Tansy Watts



John Hills



Nicola Kemp



Angela Druckman



Adriana Consorte-McCrea



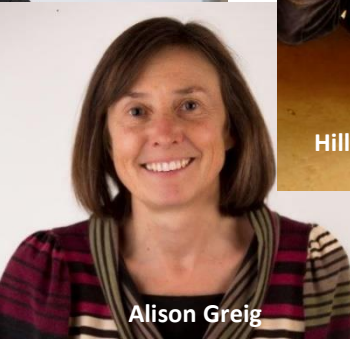
Chris Preist



Maz Hamilton



Debby Cotton



Alison Greig



Hillary Leighton