

Becoming ‘learner drivers’ for the future: re-thinking learning and education in a troubled world

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It was 1971 and I had just graduated as a teacher. Browsing in a London bookshop, I discovered a book which – while not exactly ‘changing my life’ – certainly influenced its direction from that point. The title of the book - sufficiently intriguing to grab my attention - seems more relevant than ever today. It was *Teaching for Survival* (Terry, 1971).

Nearly half a century later, there is a sudden upsurge in deep concern about climate change and the prospects for both the human and natural worlds (IPPC 2018, Laybourn-Langton, 2019). As I write, *Extinction Rebellion* is making waves on the streets, Sir David Attenborough has just presented a frank BBC documentary where he states that we face ‘man-made disaster on a global scale’, noting that, ‘what happens now and in these next few years will profoundly affect the next few thousand years’ (Attenborough, D. 2019i).

<https://www.bbc.co.uk/programmes/m00049b1>

Earlier, launching the WWF *Living Planet Report* (Grooten and Almond, 2018), Tanya Steele, WWF UK Chief Executive, warned that, ‘We are the first generation to know we are destroying our planet and the last one that can do anything about it’. Evidence seems to be mounting that an embryonic ecological consciousness is at last taking root, for example, the governors of the Bank of England and Banque de France have warned that the global financial system faces an existential threat from climate change and needs to take urgent reformative action. Awareness and concern are, it seems, moving into the mainstream, yet it is debatable how far the formal education system in its current form is assisting or hindering this movement.

Climate change has been likened to a ‘slow-motion car crash’ (Thorne, 2019), where we are all ‘driving’ the future, through our everyday actions and choices. As Attenborough underlines, the rapid and potentially disastrous changes that the Earth is undergoing are a ‘result from the global impact of our own species’. They are, he says, ‘a consequence of the way we have chosen to live’. (Attenborough, D. 2019ii, p.4). So virtually all of us - to a greater or lesser extent - have a foot on the accelerator, and even a finger on the steering wheel - although some interests of course have a much greater influence than others. But collectively we are lurching into an increasingly bumpy and uncertain future - even as an increasing but growing minority is saying ‘brake’ and ‘turn the wheel now!’

How has this come to be? Well, in essence, this is learnt behaviour. In Western society, particularly in the last 30 or so years, we have learnt that we can have anything we like, go anywhere we like, pretty much do anything we want, in a culture of endless consumerism, materialism and individualism – regardless and often ignorant of mounting social and ecological costs, now or into the future. We have had free ‘licence’ and encouragement to adopt a thoughtless rather than a thoughtful lifestyle. To continue the metaphor, most of the Western and Westernised world has been driving change ‘without due care and attention’. Back in the motoring world, this can lead to losing your licence.

If we cannot lose our ‘lifestyle licence’, at very least, we need to accept that *we all need to be ‘learner drivers’ now* - if the future is to be secured: more care-full, going slower, reading our broader environment, aware of dangers, risks and signals of change. Because humanity is facing testing times like never before - not just once as in the driving licence test, but over lifetimes. We are living in a different world than was the case even a decade or two ago, and the future is profoundly uncertain, if not scary. There is an emerging view amongst scientists, historians, and politicians that collapse of some sort —economic, technological, social, ecological, or some combination—is increasingly likely this century, ushering a very different ‘post-growth’ world. According to one detailed research paper:

a socio-ecological discontinuity represented by the end of growth is an increasingly real and pertinent prospect for the global community and deserves explicit treatment in all spheres of society (p4).

Further, the authors state:

... the primary imperative must be to reduce human impacts and prevent a further loss of carrying capacity, to protect the prospects of present and future societies and the ecosystems they depend upon (Crownshaw et. al. 2018, p18).

There is an overwhelming case then for *un-learning* habits and ideas that got us to this point, *re-learning* and reclaiming approaches that are more sustainable and life-affirming, and *new learning* that will help sustain human and natural systems wellbeing into the future. And this presents a major challenge for formal education systems which tend to propagate *first order learning* – that is, more of the same, which tends to be transmissive, information-led, cognitive learning experiences conducted within disciplinary silos that often have little regard to wider global trends and trajectories outside their immediate compass. In the new world of

risk, this is no longer sufficient, and may well be deleterious to the chances of a more sustainable future.

All education is ostensibly about the future. But paraphrasing Paul Valéry's phrase, the 'future is not what it used to be'; where we thought we were heading has radically and rapidly changed. This demands *second order learning* – an introspective re-examination of assumptions and values which have led us to this place, at individual, community, professional, and organisational levels precipitating a re-thinking of purpose, policy, strategy and design – in education as well as in other sectors across society.

To some extent, the UN Sustainable Development Goals (SDGs) launched in 2015 (which present a global and comprehensive framework for addressing the global and systemically-related issues that face humanity and the Earth), and the extensive activity that they have since given rise to, can be seen as the result of a kind of second order learning process amongst policymakers and sectors of society - although old assumptions tend to die hard. Certainly, the SDGs must be realised to maximise the chances of securing a liveable future within safe planetary boundaries, for billions of people. And the SDG roadmap in principle aligns the economy with the Earth's life support systems. However, a recent report from the Stockholm Resilience Centre, (Randers et al, 2018) shows that attempting to achieve these socio-economic and environmental goals using *conventional growth policies* would make it virtually impossible to reduce the speed of global warming and environmental degradation. The research team tested three other scenarios and the only one that met all goals was the one that implemented systemic transformational change.

Education – *potentially* - has a major and central role in facilitating the achievement of the SDGs and transformational change, although the sustainable development community has been slow to pick up on this strength. The means by which the goals can be addressed are often presented as: policy and monitoring, finance and incentives, legislation and regulation, information and campaigns. But these policy instruments are often only effective for as long as they are in operation - because they are externally applied. Education however, can build lasting change - that is, *sustainable change* - when it is owned by the learner. Whilst policy instruments tend to treat symptoms of unsustainable activities and behaviours, education and learning can reach hearts and minds, and therefore address root causes.

Particularly since the Rio Earth Summit of 1992, and Agenda 21 - which in chapter 36 laid out the challenge of educating for a more sustainable society - an international 'Education for Sustainable Development' (ESD) movement has emerged strongly, drawing on longer-

established approaches such as environmental education, conservation education, development education, human rights education, and global education. This movement is concerned with identifying and advancing the kinds of education, teaching and learning policy and practice that appear to be required if we are concerned about ensuring social, economic and ecological viability and well-being, now and into the long-term future. It is, on the face of it, hugely ambitious. UNESCO, which has had a critical role in championing ESD, particularly during and since the UN Decade of Education for Sustainable Development (2005-14), states on its current website:

ESD empowers learners to take informed decisions and responsible actions for environmental integrity, economic viability and a just society, for present and future generations, while respecting cultural diversity. ESD is holistic and transformational education which addresses learning content and outcomes, pedagogy and the learning environment. It achieves its purpose by transforming society. <https://en.unesco.org/themes/education-sustainable-development/what-is-esd>

But attempting to transform society might be a more accurate description. A current UNESCO policy document notes that there is more work to be done on the transformative elements of ESD practice (UNESCO Executive Board, 2019). Key figures in the UNESCO ESD team in Paris are meantime cognisant that achieving the SDGs 'requires a profound transformation in the way we think and act' (Leicht, Heiss and Byun 2018, p.8).

This begs the question whether ESD is sufficient in conception, scale, resource and provision to do what is required. As an international movement, it can claim some real success in influencing both educational policymakers and practitioners. But at the same time, ESD - led by UNESCO - has often been lacking in a sufficient critique of the dominant cultural worldview and associated educational policies and practices, and second, lacking the articulation and elaboration of a necessary alternative which might convincingly underpin a more holistic vision. As I've suggested elsewhere, 'We lack a widely shared alternative paradigm of educational philosophy, policy, and practice which is at once humanistic and ecological, aligned and responsive to the complex social-ecological trends and risks now manifest within our Anthropocene times' (Sterling 2017, p39). The wholesale 'reorientation of education towards sustainable development', as championed in the ground-breaking Chapter 36 of the Agenda 21 agreement in 1992 (<https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf>) has only gone so far in the nearly 30 year period since, and not nearly far enough. According to Silova,

Komatsu and Rappleye (2018) the key barrier is the dominant assumption in education policy that its prime role is to support economic growth:

.... most international development efforts thus far – including education initiatives associated with Millennium Development Goals (MDGs) and Sustainable Development Goals (SDGs) – have consistently prioritized Western education models that focus on economic growth and social equity over environmental concerns. In the current context of accelerating climate change, such an approach to education represents not a solution, but rather a key problem for environmental sustainability.

<https://www.norrag.org/facing-the-climate-change-catastrophe-education-as-solution-or-cause-by-iveta-silova-hikaru-komatsu-and-jeremy-rappleye/>

So whilst ESD has had - and continues to have - proven value, the greater challenge is the transformation of mainstream educational policy and practice *as a whole* – in parallel and co-evolving with the social and economic transformations that the Stockholm Resilience Centre *inter alia*, suggest are now necessary. As UNESCO-based authors themselves write:

....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).

By implication, this requires second-order and third-order (epistemic/paradigmatic) learning *within* education systems and by policymakers and practitioners - a breaking out of the limited purposes and paradigms that currently guide educational norms. Not least, the stifling and narrowing (and now decades-long) influence of neo-liberal thinking on the perception, conception and practice of education must yield to a higher purpose aligned to addressing the possibility of securing social and ecological wellbeing in our troubled times.

Sustainability issues are typically characterised by 'wicked problems', complexity and uncertainty, requiring participative and experiential pedagogies, collaborative and interdisciplinary engagement, real world explorative action research, innovative research on ecologically sound technologies, community engagement and service learning, the nurturing of sustainability competencies, and an open-ended and provisional approach to knowledge. This is a different and dynamic kind of education and learning for a different age.

Crownshaw et. al. suggest that:

The fundamental purpose of education will necessarily shift from providing skilled labour needed to grow the economy, as is the case currently (Martin and Jucker, 2005), to preparing students to become effective and engaged members of resilient societies (p14).

Further, based on the view that we will inexorably move towards a post-growth world, they state that:

... this will bring new challenges to education, but a successful transition in pedagogy will be instrumental in producing responsible citizens, cultivating social inclusion, and training leaders capable of guiding societies through difficult socio-ecological transitions (Crownshaw et. al. 2018, p15).

Meantime, however, universities – in particular – are largely based on silos with regard to their teaching, learning and research, and so the more transformative, interdisciplinary, cross-cutting, ethically oriented and holistic approach that sustainability requires is often difficult to implement, requiring systemic change and organisational learning over time. That said, there is a growing - if 'too slow' - movement towards the 'sustainable university' internationally (Sterling et al 2013). Perhaps surprisingly, the education sector is no more advanced than other sectors in society as regards embracing this urgent agenda.

At heart, sustainability education:

'seeks to nurture transformative learning experiences that can heal, empower, energise, and liberate potential for the common good. But...educational systems or institutions cannot adequately support such transformative education and transformative learning experiences, unless they themselves have experienced or are experiencing sufficient transformative processes consistent with this ethos. While myriad "education for change" movements have long seen education as an agent or vehicle for personal and social change, the corollary—that educational thinking and policy must itself change sufficiently to allow it to fulfil this agency function—has received much less attention.' (Sterling, Dawson and Warwick 2018, p.2).

The problem does not lie just with educational systems. The kind of transformational scenario envisaged by the Stockholm Resilience Centre requires fundamental changes in

most sectors, and this implies a deep learning response. In higher education, there is some evidence that pressure for institutional change and response is coming from the student body, who perhaps have a keener sense of their futures than their lecturers or the senior managers. The UK National Union of Students (NUS) has been conducting research for more than seven years on student attitudes to sustainability, the 2017-18 iteration showing that, as in previous years, there is 'overwhelming agreement' amongst respondents that universities and colleges should actively incorporate and promote education that sustainable development, with almost 9 out of 10 1st year respondents saying they agree with this statement. (NUS 2018). <https://sustainability.nus.org.uk/resources/sustainability-skills-2017-18>

A more recent survey of staffs on the state of sustainability across higher and further education institutions, showed that 91% of respondents felt that the Government needed to take action in UK universities and colleges to ensure commitments to sustainability are being met, with 73% calling for mandatory action and 18% calling for voluntary action. 93% of respondents feel it is important for students to leave their time in formal education with the knowledge and skills required to address sustainability challenges. However, the same survey revealed that only 22% of staff surveyed consider their institutions treat environmental sustainability and social responsibility as a strategic priority, a figure that has fallen compared to the equivalent 2018 survey. <https://sustainability.unioncloud.org/articles/new-research-shows-sector-demand-for-mandatory-sustainability-action> (EAUC et al 2019).

Conclusion

Back to the driving metaphor: we can 'drive on' blindly of course, hoping for the best. Or we can anticipate, think ahead, take avoiding action, take alternative routes. We can choose to be wise learners for the future.

There is a simple but widely used learning model called the 'Conscious Competence Ladder' or 'Four Stages of Learning' which can serve us here, to illustrate shifts in consciousness. At the first stage, 'unconscious incompetence', the learner doesn't know what he/she doesn't know. He/she lacks knowledge and skills in the area and is unaware of this deficiency. They might even deny the relevance of the area consequently.

At the second stage, 'conscious incompetence', the learner recognises his/her shortcomings with regard to the topic in question, and the need to address this.

Moving into the third stage, the learner achieves 'conscious competence', acquiring and exercising ability, understanding and confidence.

At the fourth stage, 'unconscious competence', the learner is so skilled, informed and adept that his/her actions are second nature. Some theorists detect a fifth stage, which involves a critically reflective consciousness upon one's competence and being – and which allows for a dynamic learning experience and cycle beyond 'unconscious competence'.

The relevance of this model is clear with regard to the car driving test. But supposing we stretch it a little in terms of how humanity, and of how individuals, relate to the planet and indeed, each other? Given the recent upsurge of awareness and concern about such topics as ubiquitous plastics, the staggering loss of wildlife and nature, and the growing effects globally of climate change, it seems that significant numbers of us are currently moving into the second stage of 'conscious incompetence' and awareness, whilst others are pushing further to third stage, consciously choosing to pursue as far as possible a more sustainable lifestyle while working for system change that can assist the possibility of an assured future. In so doing, they are responding to a felt sense of urgency, and the need for a deeper cultural change, away from short-termism, individualism, excessive competition and materialism, towards an ethic of care, social justice, mutuality and wellbeing (see Earth Charter www.earthcharterinaction.org). But this journey surely has yet to begin for many - maybe the majority, including many of those in educational institutions that purport to educate for the future.

In all the burgeoning discussion of how, as individuals, communities, nations, and as a species, we can navigate the future safely, the role of education and learning is commonly side-lined. But as captured in the sub-title of Lester Milbrath's book *Envisioning a Sustainable Society* of some years back, we have to 'learn our way out' if we are going to make this work. (Milbrath 1989).

So the book on my shelf *Teaching for Survival* (Terry 1971) with which this essay started, is more immediate and relevant now than when it was written all those years ago. We might hope that we could exchange it in time for 'teaching for wellbeing' - if education systems meantime everywhere respond quickly and with full and genuine commitment to the existential crisis we face. 'We are running out of time but there is still hope' said David Attenborough (2019i).

We are all 'driving the future', through our everyday actions and choices. If we are to secure a safer and enduring future for generations to come, the sustainability revolution 'requires each person to act as a learning leader at some level, from family to community, to nation to world' (Meadows *et al* 2005:280). This is a big ask, but an inescapable one, and education needs to step up to the task with urgency.

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