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INTERVIEW

Transgressive learning in times of global systemic dysfunction: interview with Arjen Wals

Michael A. Peters with Arjen E. J. Wals

Arjen Wals is Professor of Transformative Learning for Socio-Ecological Sustainability at Wageningen University. He also holds the UNESCO Chair of Social Learning and Sustainable Development. Furthermore he is the Carl Bennet Guest Professor in Education for Sustainable Development (ESD) at Gothenburg University in Sweden. He obtained his PhD in 1991 with a Fulbright fellowship at the University of Michigan in Ann Arbor. His dissertation tackled the interface of environmental psychology and environmental and sustainability education. His recent work focuses on transformative social learning in vital coalitions of multiple stakeholders at the interface of science and society. His teaching and research focus on designing learning processes and learning spaces that enable people to contribute meaningfully sustainability. A central question in his work is: how to create conditions that support (new) forms of learning which take full advantage of the diversity, creativity and resourcefulness that is all around us, but so far remain largely untapped in our search for a world that is more sustainable than the one currently in prospect? In 2014 he was the lead author of an article published in *Science Magazine* on the role of citizen science in bridging science education, environmental education and sustainability. He is editor and co-editor of a number of popular books including: *Higher Education and the Challenge of Sustainability* (Kluwer Academic, 2004), *Creating Sustainable Environments in our Schools* (Trentham, 2006), *Social Learning towards a Sustainable World* with foreword by Fritjof Capra and an afterword by Michael Apple (Wageningen Academic, 2007), *Learning for Sustainability in Times of Accelerating Change* (2012), and of Routledge's *International Handbook on Environmental Education Research* (2013). He has (co)authored over 250 publications in multiple languages. Wals is a co-founder of Caretakers of the Environment/International and a recipient of the environmental education research award of the North American Association for Environmental Education, and former president of the Special Interest Group on Environmental & Ecological Education of the AERA. He writes a regular research blog that signals developments in the emerging field of sustainability education: www.transformativelearning.nl

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A brief and popular video of him arguing for the importance of the engagement of education with sustainability challenges can be viewed at: www.youtube.com/watch?v=iqB4ryiS4cY

Michael Peters (MP): I have been thinking of this interview now for quite a while, maybe when I first met you at the first Sustainability Education Policy Network http://sepn.ca/ conference because you are one of the few leaders in education to exercise a responsibility to rethink education and the school in times of global systemic dysfunction and you provide us with a new concept of 'transgressive education' as a means to do this. So perhaps before I get you to outline the relevant concepts perhaps you can give us something of your biography leading to your UNESCO chair.

Arjen Wals (AW): Both my parents were environmental educators. My mother worked with primary schools and developed tool kits and resources that engaged pupils in water quality issues in connection to the Rhine River. She linked cultural and environmental sensitivity by linking schools from Germany and The Netherlands that were connected by the river. My father, Harry Wals, was a key figure in the Dutch environmental education scene but also worked internationally. He was the Director of a Department of the city of The Hague that was responsible for school gardens, community gardens, educational city farms and environmental education programmes for schools and neighbourhoods. He also co-founded the Foundation for Environmental Education in Europe (FEEE), which is known for the Blue Flag and the Ecoschools.

Although I grew up being concerned about environmental issues, I did not think environmental education would be the solution – basically thinking that by the time society would be aware and care, it would be too late, if we ever would get to that point. So I opted for environmental engineering and more technical solutions to environmental problems. However, already in year two I realized that technological solutions tended to be end-of-pipe solutions that ignore the root causes of environmental issues, which are grounded in what I now call 'global systemic dysfunction'. I became aware that environmental problems are not just about ecology and environment but also about social justice, inter-generational equity and the values we live by or are forced to live by as a result of the structures of which we are part. So, I suppose to the delight of my parents, I shifted to environmental education, which over time has become transformative learning for socio-ecological sustainability.

I have always worked internationally – indeed taking advantage of some of my father's connections: he represented The Netherlands internationally at landmark conferences such as the 1970 IUCN conference in Nevada (where the Commission on Education and Conservation was established) and the 1977 Intergovernmental UNESCO–UNEP conference on EE in Tbilisi (which is still seen as defining moment in the history of EE). Thanks to him, I got in touch with one of the founding fathers of Environmental Education, Bill Stapp, a professor at the University of Michigan, who started the first research journal in the field, the *Journal of Environmental Education* in 1969 and became UNESCO's first Director of EE in the mid-1970s. I ended up doing my PhD with him at University of Michigan, and in a modest way followed his footsteps when being appointed UNESCO Chair in Social Learning and Sustainable Development in 2008. Bill Stapp, my parents and the affordances of my upbringing, have played a key role in getting to the point where I am today.

MP: Thanks for that brief history. It does indicate how relatively recent EE is – roughly 50 years. What a fantastic legacy your parents left and now second generation that spans the first ecological era. A few quick questions: What was the topic of your PhD? Can you tell us a little about Bill Stapp – what were the influences upon you and what was his conception of EE?

AW: My PhD focussed on young adults growing up in inner-city Detroit. While starting my PhD in 1987 the Detroit School Board had asked Bill Stapp to help re-design the curriculum of Junior High and Middle Schools to make it more relevant and meaningful to the lives of these kids who basically viewed school as a bunker in an urban war zone. Crack-cocaine addiction, gang activity, violence, abandoned houses, metal detectors in schools, teen-pregnancy, high dropout rates and so on, characterized the lifeworld of these young adults. Teachers had little understanding of this world as hardly any of them lived in those neighbourhoods: they commuted to their work from the suburbs. The curriculum content did not speak to these children as it was rooted in a world and a history comple-tely different from theirs. Bill Stapp had been in Australia and became familiar with the work of Carr and Kemmis on action research, and connected with Ian Robottom of Deakin University. I had the good fortune of being in Ann Arbor when the question from the Detroit Board of Education came as it led to the combining of action research with community problem-solving – which became known as AR&CPS – as a way to ground the curriculum in the everyday realities of children growing up in Detroit.

At the same time, a well-known Dutch phenomenologist Ton Beekman from the so-called Utrecht Phenomenological School, which was established by Martinus Langeveld after the Second World War, happened to live in Ann Arbor and worked closely with Loren (Biff) Barrett, who was a professor in the School of Education. It was like a perfect storm. I was able to combine the environmental interests that were central in the School of Natural Resources and Environment – where I was based – with the educational reform interests that were central in the School of Education. My committee had the prag-matist Bill Stapp (who had a deep concern for people and environment), Ton Beekman (who strongly felt about the bodily presence of a researcher in the lifeworld of those who are seeking to improve their faith) and Bunyan Bryant (who was a key scholar in environmental justice in North America).

I spent two years in the African-American inner-city Detroit schools as well as in some of the mostly 'white' suburban schools to also get a better understanding of young adoles-cents' perceptions of environmental issues and how they were addressed or ignored in the curriculum. AR&CPS basically meant that the students in small groups went out into their community using a camera (back then a polaroid camera that would print the picture right away) with the task to decide on five pictures that represented something positive about their community and five that represented a concern or something disturbing. After an hour or so, the groups would return to the classroom and put their pictures on the black-board. They would then jointly cluster the pictures in thematic areas, after which the class would agree on the most burning issue they wanted to address in the weeks or months to come, however long it would take. As teachers and facilitators, we had little idea of what topics would emerge, but whichever it was we would run with and explore: researching the issue by using community resources and relevant literature, defining and re-defining the issue, identifying key actors affected by the issue but also actors who might be able to

help improve it, figuring out what forces or powers exist to create positive change, but also what forces and powers are in place that try to keep things the way they are or even work in the opposite direction. Then they would design a plan of action that they felt could work in resolving the issue (e.g. reducing school violence, making streets friendlier, parks more accessible) which they would try out, evaluate, re-fine, etc. Students would keep diaries of every session and teachers from Social Science, Languages, Natural Sciences, Arts and Humanities would try to connect with the AR&CPS project as much as they could. Students, teachers and the researchers from the University of Michigan all kept journals in which they described and reflected on their experiences with the project.

One of my colleague PhD students, Jim Bull, followed the students' development of agency and empowerment, whereas I focussed more on how they 'defined' and 'perceived' vague concepts such as 'environment', 'nature' and 'place'. Since I used, what I called, critical phenomenology to understand the students' thinking about this, being there, building trust, 'bracketing' my own prejudgements, and finding ways to develop their actionality to realize positive, self-determined change in their condition, was essential in all this. It was Langeveld who once wrote: 'The value of a phenomenological study is measured in terms of its power to let us come to an understanding of ourselves, and an understanding of the lives for those for whom we bear pedagogic responsibility' (Langeveld, 1983, p.7).

The dissertation was later turned into a book 'Pollution Stinks!' with the subtitle 'Young adolescents perceptions of nature and environmental issues with implications for education in urban settings' (Wals, 1994) with, believe it or not, a grant from the Dutch Ministry of Agriculture and Fisheries. The Ministry felt that the findings could have major implications for environmental education in the Netherlands. The AR&CPS approach and a number of cases were described in a book I co-authored with Bill Stapp titled 'Environmental Education for Empowerment: Action Research and Community Problem Solving for Schools' (Stapp, Wals, & Stankorb, 1996). In Detroit the approach faded away after changes in leadership in both the schools and in the Detroit Board of Education. Still, I'd like to think that our work back then has in some way contributed to the foundation of the greening of Detroit and the creation of one of the world's post-industrial cities but that's wishful thinking. It would be nice to be able to go back and try to get in touch with the students who took part in the programme to see where they ended up and what they are doing today. Interestingly enough AR&CPS travelled to other parts of the world such as Kwazulu-Natal (South Africa), Taiwan and Quebec (Canada). In Quebec, it has become a part primary school education today. I think my Detroit years have had an enormous influence on my research interests and orientation.

MP: What's the brief for the UNESCO chair and what are the main intellectual changes have you undergone since 2008?

AW: First let me start by saying something about the relationship between EE and ESD or Education for Sustainability. EE dates back to the 1960s – not long after Rachel Carson's Silent Spring and to the years leading up to the Report of the Club of Rome 'Limits to Growth', whereas ESD dates back to the United Nations Conference on Environment and Development, also referred to as the first Earth Summit held in Rio de Janeiro in 1992. The Earth Summit was held five years after the so-called Brundtland Report 'Our Common Future', which put the term sustainable development in the spotlight in the

international policy arena. Environmental Education, in some ways an expansion of nature conservation education that is much older, initially focussed on raising awareness, improving understanding, fostering environmental values and behaviour in an attempt to protect the environment and reduce pollution. In the early years, it did not address critical thinking and the issues related to economic and social inequity and exploitation. It was not until 1975 (so-called Belgrade Charter on EE) and 1977 (the Tbilisi Declaration on EE) that these dimensions were added. ESD in many ways resembles this expanded interpretation of EE but was launched as something quite different as it brought the global dimension and the North–South inequities. To some, it brought in new societal actors, actors that were little engaged or interested in EE but connected better with SD. To others, ESD marginalized EE in countries where EE had established itself quite firmly but now had to be converted into ESD. Again others felt that ESD tended to ignore the ecological and people's connection to nature, which they consider a critical foundation for sustainable living. A lot has been written in journals on EE and on ESD and in UNESCO reports on the meaning of ESD and its relationship with EE (see for instance Jickling & Wals, 2008 and Wals, 2009).

Of particular interest, from an education point of view is the discussion between instrumental and emancipatory advocates of EE and ESD. The former group tends to argue that the rapid decline of the state of the Planet requires that we use all available tools and instruments to change our behaviour, including education, whereas the latter group tends to argue that it is not the purpose of education to change people's behaviour into a predetermined direction. Although I agree that our Planet is in a dire state and that we must act now, I do find that the role of education is not to change behaviour (e.g. to get people to carpool, recycle or to shift away from meat-based diets) but to create capacities for critical engagement in the key issues of our time such as: anticipatory thinking, integrative thinking, dealing with complexity and ambiguity, action competence, to name just a few, and to create learning spaces for the development of qualities such as care, empathy and solidarity that appear critical. The emancipatory way will lead to a critical citizenry with a planetary and global consciousness, perhaps grounded in a local place and community, that hopefully will result in more people living more lightly and equitably on the Earth. Ultimately that deeper and more fundamental societal change will be more sustainable than quick fixes, short-term thinking and a focus on behaviour without consideration of the deeper issues and values. Some say that this is a language game or a matter of semantics and that the emancipatory perspective is just as instrumental in the end, but I see it as critical distinction that strengthens deliberative democracy and opens up conversations about the nature of both education and sustainability.

This brings me then to my UNESCO Chair. UNESCO became the lead agent for the UN to implement the Decade of Education for Sustainable Development (DESD), which ran between 2005 and 2014. During that time they appointed over 10 UNESCO Chairs who had expertise in a specific domain relevant to ESD, for instance ESD in Early Childhood Education, ESD in Teacher Education and ESD in Higher Education. Since I had been working on social learning in the context of sustainability in community settings and had published an edited volume in 2007 'Social Learning towards a Sustainable World' which became a popular book, not in the least because of the excellent contributors, including Michael Apple, who you interviewed before in this journal, UNESCO decided to appoint me as a UNESCO Chair in Social Learning and Sustainable Development. In

that role I develop university courses and modules, initiate and support PhD-research on this topic in the Netherlands but also in countries such as Sweden, Bangladesh, Vietnam, Ghana, South Africa and Colombia.

MP: You use three concepts to explain the conception of EE which you practise and while these may appear obvious I wonder whether you could briefly explain 'social learning', 'transformative learning', and 'transgressive learning'? What does the progression imply?

AW: Indeed there is a certain chronology and progression in using these conceptions. Social learning in the way I use it has little to do with Bandura's use of the term, which is more behaviouristic and instrumental. The way I interpret is as a concept that refers to learning that is inspired by the dissonance that is created when different perspectives meet in socially favourable conditions. So dissonance, diversity and social cohesion are all critical in finding new forms of thinking that can brake with stubborn routines and practices by co-creating alternative ones that are supported by a wide range of actors. When those actors do not get along or even distrust and dislike each other, the diversity between them will block social learning – we see plenty of examples of this in multi-cultural settings where people do everything to avoid engaging meaningfully with 'the other' and even become violent towards each other. On the other hand, when a common, informal and non-threatening space is created where people get to know each other and discover their common humanity, they are more likely to listen and put themselves in the mind of the other. This is when diversity can become a driver of joint learning and creativity and a source of positive energy. Fortunately, there are also plenty of examples around the world where multi-cultural neighbourhoods are some of the most desirable and vibrant places to live. I see social learning as a key mechanism for co-creating sustainable solutions that can help replace resilient unsustainability and overcome global systemic dysfunction.

Now about transformative learning. It was Mezirow who suggested that learning can only be transformative when we come to recognize and modify the assumptions and beliefs that frame our tacit points of view and influence our understandings, our values and interpretation of the world, but also of others and of ourselves and that determine our actions (see Mezirow, 2009). Transformative learning opens up new lenses of perception and strengthens our capacities for understanding and navigating complex challenges, like the ones of addressing socio-ecological challenges and creating more sustainable societies and ways of living.

Now both the idea of learning on the edges and associated boundary crossing where diversity becomes generative – that tends to be associated with social learning – as well as mirroring, self-awareness and re-framing – that tends to be associated with transformative learning – are necessary in our continuous search for a world that is more sustainable than the one in prospect, but still it is not enough. And this is where transgressive learning comes in. We must also consider the structural element and the neo-liberal forces that drive much of what we do, including education. Presently, education, training, innovation, human 'resource' development, etc. is almost exclusively serving the economy, a particular economy even, one that has faith in the market, depends on growth, efficiency, materialism and consumerism, and one that neglects to adequately value the Earth's resources and the non-human world. In our present world, the drive to 'consume' is infinitely greater than the drive to sustain. Personal growth has become a buzzword in society, as is 'lifelong

learning'. We seem to have forgotten that education and the economy are there to serve people and, indeed, planet. Somehow it's been reversed: people and planet are serving the economy. To what end? Transitions towards a more sustainable world are unlikely to occur by relying on individuals becoming sustainability citizens without considering political and structural dimensions. Much literature focussing on sustainability competence places a lot of weight on the role of the individual and is based on the usually flawed assumption of the capable citizen (all equal before the law) and a level playing field between 'atomic' individuals. But individuals are not 'atomic', although they are often 'atomized' by the practices and procedures of institutions and the ideology of 'democratic' and 'consumer choice', while their behaviour is heavily circumscribed by structures, institutions and practices over which they have little influence or control.

There are many different examples of bringing deliberative democracy to wicked and complex situations, to create new spaces for collaborative and social learning that at times will need to be disruptive to break from hegemonic routines and vested powers and interest that are not serving the well-being of people and planet. This becomes clear when you read, for instance, Barry (2005) and Hopkins (2013). Being disruptive or transgressive is an essential part of sustainability-oriented learning, in part also because it can create substantive rights for persons who as formal citizens have procedural rights but which they cannot exercise. We wrote about this recently in an article about a new research programme we have just started with nine countries – two from the North and seven from Africa, Asia and Latin America – about T-learning in times of climate change funded by the International Social Science Council (Lotz-Sisitka, Wals, Kronlid, & McGarry, 2015). Barry (2005) views sustainability citizenship as a form of resistance citizenship existing within and as a corrective to unsustainable development. Transgressive learning is needed to challenge and disrupt hegemonic structures, powers and routines which overtime have, willingly of unwillingly, become normalized and have become hard to change. In another article we refer to this as 'maladaptive resilience' – resilience that is rather unhealthy. In responding to climate change, there's a lot of talk in academia, governance and business and industry about adaptation and resilience, but I think that's a dangerous focus. If we really want to do something about climate change – as a manifestation of global systemic dysfunction – we need to look at the root causes. So instead of, or at least, complementary to a focus on adaptation and resilience, a focus on disruption and resistance may be more generative from a sustainability point of view. Transgressive learning is about exposing marginalization, exploitation, dehumanization and other forms of systemic unsustainability, and disrupting the powers and structures that work towards maintaining it. Needless to say that this is the most controversial one of the three forms of learning I like to emphasize. And, we need to think more about what it looks like and how learning spaces can be designed and supported that are conducive to facilitating transgression and disruption. I guess that with time I have become more radical – perhaps triggered by the fact that we are well overstepping the Earth's planetary boundaries and that the rising inequity and growing gap between rich and poor, coupled with a shrinking biocapacity, changing climates and associated forms of violence and streams of refugees and migrants. At present what happens in most schools, universities and communities accelerates unsustainability and we have a moral responsibility to do something about that. I find it interesting and timely that education scholars, much like yourself, such as Martha

Nussbaum, Peter McLaren, Michael Apple and fellow Dutchman, Gert Biesta, are all enga-ging with sustainability in one way or another.

MP: This all sounds good and well but what does social, transformative and transgressive education look like in practice?

AW: Well, first I should say that there are many practices. Some are more closely connected to formal education, others are more located in communities; some are unfolding in peri-urban settings around urban agriculture, ecovillages and transition towns; some in more indigenous contexts such as within the *buen vivir* movement in Latin America. Two of my PhD students in Colombia do some very interesting work and research in this area (Chaves, Macintyre, Riano, Calero, & Wals 2015). There are even some transitionary prac-tices in the context of business development by so-called '*sustaino-preneurs*', a topic PhD student Jana Timms is working on in the North of Germany.

So the practices are rather diverse but let me give some examples that are more con-nected to schools and universities. There are schools – both primary and secondary – in different parts of the world that are re-thinking their school profile and identity using health and sustainability as catalyst for innovation and a normative direction. Sometimes they do so under the flag of 'Ecoschools', and sometimes they use other labels such as health promoting school or a 'whole school'. What they have in common is that they inte-grate emerging concepts such as cradle2cradle, closed-cycle design, sharing economy, permaculture and biomimicry in their curriculum. But they do more: they try to re-design school grounds and the interior of the building – often using democratic processes – to become greener, to invite interaction and relationality and to become a kind of living learning laboratory for health and sustainability. A green school ground can become a source of healthy – school grown – food, a learning space for biology education, a more inviting space to hangout and connect. These schools also try to walk-the-talk: using alternative energy sources such as solar and wind to power the school, having heal-thier and responsible food in the canteen or for school lunch, reducing packaging, com-posting food waste to be used in the school garden and so on. They also work more closely with parents, but also with local businesses, such as garden centres and bike repair shops. The idea is that school becomes a more pleasant, relevant and connected place that breathes sustainability as it were. In an article I co-authored in 2014 in *Science Magazine*, we describe some of these examples (Wals, Brody, Dillon, & Stevenson, 2014).

The learning connected to these kinds of school transitions tends to be social, transfor-mative and, at times transgressive when resisting neo-liberal tendencies in mainstream education that focus on efficiency, accountability and that what can be measured, quan-tified and compared. Schools that give in to these tendencies or are hijacked by them have little possibility to move in the direction described. But the schools that are able to resist – often with the help of disgruntled parents and teachers and a visionary and brave head of school – can escape and recreate. These pockets of resistance can be found in transition towns, indigenous communities, post-industrial cities and in the independent school movement in Latin America. There is some evidence that students and teachers become more motivated, can concentrate better, and that young people who spend more time outside on the school ground and in the community also tend to be healthier and less likely to become overweight. These kinds of 'whole schools for the whole human

being' in a way help realize many policy goals local governments seek to achieve: promoting health, improving education, countering climate change, increasing biodiversity, creating sustainable communities, etc.

Other examples can be found in higher education – where community engaged research, responsible research and innovation – see for instance the EU supporter EnRRich project and the Living Knowledge network around the so-called science shops (www.livingknowledge.org) as well as sustainability-oriented higher education are gaining attention and strength. Some of these examples are initiated by activist students. In Amsterdam, students and staff formed the *Bildung Academy* shortly after students – later joined by staff members – occupied the administrative headquarters of the University of Amsterdam for weeks to protest, in my words, the commodification of higher education and the lack of critical and creative thinking. The Bildung Academy is run by students and former students who are linked to all kinds of free thinkers from science, society and thinkers. One of the modules they developed is called 'rebellion', while another one focuses on 'empathy'. Other ideas in education that basically blur the boundaries between formal, informal and non-formal education and between science and society are the ideas of so-called pop-up universities and nomadic schools. They represent groups of multiple actors who have a concern or interest in bringing about change in a local situation that is, in my words, unsustainable, that they want to address until situation has improved. The learning takes place in the context of the issue with those who are affected the most and who have some expertise of insights that can be useful. These hybrid learning configurations – of which university or school students and staff are or can be part – are temporary, change in make-up, and sometimes travel further. An example of this way of learning is the Maple Ridge School in the Vancouver area in Canada, which is a wondering school without a permanent home: it literally travels through the community year round while still meeting the national curriculum requirements (Blenkinsop, Telfort, & Morse, 2016). In a way the community *is* its home.

MP: Looking to the future what are the main issues for education in the Anthropocene? And what you like to establish as your legacy?

AW: Well we need nothing less than a radical re-orientation of education. The one single species that has been able to alter the Earth's ecosystems, climates, ocean levels, biodiversity in detrimental ways, must now find a way to do better. Indeed positivistic, reductionist, empirical analytical science and a neo-liberal economic system that demands continuous growth and innovation has broad us loads of possibilities and has made live for many very comfortable – although certainly not for all, but we now are beginning to understand that the 'side-effects' of this way of thinking are accelerating and limiting the futures for humanity and the other species we are dragging into our mess.

In a recent inaugural address at Wageningen University (Wals, 2015), I stated that young people are disproportionately affected by global sustainability challenges in that they will have to live longer with the socio-ecological consequences of lifestyle and development choices made by the generation of their parents and grandparents, particularly in the wealthier parts of the planet. Fortunately, they will also have more time to work on them. It's important that being aware of the nature and seriousness of sustainability issues is in itself insufficient for resolving or even improving them. In fact, raising awareness about sustainability issues without developing people's capacity to meaningfully

and adequately address them may lead to powerlessness, apathy and withdrawal and as such could potentially do more harm than good.

So here's a task for education: engaging young people meaningfully in the key challenges of our time by creating spaces for integrative thinking, the consideration of values and ethics, the possibility to critique, act and transform, to find our common humanity and to explore ways – new, old, indigenous – to connect with those near and far in both time (past–present–future) and space (local–regional–global), with the human and the non-human and more-than-human. This will require a consideration of multiple ontologies and epistemologies, the transcending of disciplines: connecting the arts, humanities and the sciences, but also a deepening of democratic processes and what we might call the search for meaning as opposed to materiality. Perhaps we need to add another T to T-learning: transcendental learning. Disrupting the commodification of education and the hijacking of education for the single purpose of creating lifelong flexible workers, who need instant gratification by quick access to consumer gimmicks with short lifespans that feed into ever-shrinking attention spans, will be critical. Perhaps this is a rather bleak and somewhat exaggerated representation of modern education but I think the point I am trying to make is clear.

As far as my legacy is concerned … that sounds big. You know, I do sometimes wonder: does my academic writing and my travelling across the globe to speak at conferences about these concerns and ideas make any difference? Or worse, does it amplify unsustainability by enlarging my carbon footprint? Who reads nowadays? Who is able to listen for more than a few minutes uninterrupted by a WhatsApp sound, a text message, a news alert, a weather update? And those who *do* read and *do* listen or, better, engage in dialogue and conversation about these issues, what do they do with it? Do the stories and conversations travel further? My most optimistic answer is that over the years I have taught and mentored hundreds of students, I have 'reached' thousands of people attending events where I have spoken, and may-be I have reached some people who read my blog or my tweets. If only a small percentage of all of them have been triggered or disrupted or have been made slightly uncomfortable or perhaps been inspired … if only a small percentage has taken up some of what I am trying to advocate in their professional and personal life, then my ecological handprint might be bigger than my ecological footprint. Maybe in the end I will have had as much impact as my parents, and maybe my children in one way or another will take up some of this and carry it further. That would be quite something.

Disclosure statement

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Philosophy and Politics: Selected Works (2011); *Education, Cognitive Capitalism and Digital Labour* (2011), with Ergin Bulut; and *Neoliberalism and After? Education, Social Policy and the Crisis of Capitalism* (2011). He was made an Honorary Fellow of the Royal Society of NZ in 2010 and awarded honorary doctorates by State University of New York (SUNY) in 2012 and University of Aalborg in 2015.

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