

Entangled Futures

Arjen Wals on Cotomy, Eco-Bildung, and Global Citizenship Education

Simone Leone

<https://orcid.org/0009-0004-2234-8240>

✉ simone.leone3@unibo.it

Abstract

This interview with Professor Wals explores global citizenship education through the concepts of cotomy and eco-Bildung. Wals reflects on the relational nature of humans within ecological boundaries, the ethical responsibilities toward other species, and the limitations of competence-based models. He discusses practical pedagogical approaches, including sustainability walks and transgressive learning, that cultivate critical awareness, ethical reflection, and systemic thinking. The conversation highlights how education can foster flourishing for both humans and the more-than-human world.

A.Wals bibliography

Arjen Wals is Professor of Transformative Learning for Socio-Ecological Sustainability at Wageningen University, where he holds the UNESCO Chair in Social Learning and Sustainable Development. He is also a Visiting Professor at the Norwegian University of Life Sciences (NMBU) and an Honorary Doctor of the University of Gothenburg. His research explores how to create learning ecologies that foster sustainable lifestyles and more relational, ethical, and critical educational approaches, with particular attention to institutional sustainability and the decolonisation of education. He regularly writes a blog

highlighting developments in the emerging field of sustainability education:
www.transformativelearning.nl

Keywords

Global Citizenship Education (GCED); Cotonomy; Eco-Bildung

INTERVIEW

Interviewer

Good morning, Professor, and thank you very much for taking the time to speak with me. I would like to begin by referring to the seminar you gave yesterday, *Averting Collapse: Contemplating Earth-Centred Education and Transgressive Learning in Times of Global Dysfunction*, in which you introduced, among other concepts, the notion of cotonomy. Could you start by explaining your understanding of global citizenship education and how cotonomy and eco-Bildung expand or reshape it?

A. Wals

My own starting point was more in ecology and the environment than in the humanities or social sciences. I have always been concerned with learning to live more lightly on the planet — without overstepping the planetary boundaries we now recognise. That concept implies there are limits to what humans can do and a responsibility to maintain ecosystems so that humans can thrive without compromising the capacity of other species to do the same.

As I became more grounded in academia, I realised that these large environmental problems are not merely located “between the North and the South Pole”; they are, in an important sense, between our ears: they are expressed in the ways we think and in the values we hold or ignore. I came to understand that the issue has a great deal to do with our being and becoming and with what it means to be human on a finite planet.

When I entered the field of environmental and sustainability education, I discovered many colleagues shared roots in ecology and the environment, but not necessarily in educational science, sociology or psychology. Perspectives from the social sciences, the humanities and the arts were often missing. Equally, I encountered an instrumental view of education: education conceived primarily as a tool to influence or shape human behaviour. People with environmental concerns often assume that the highest priority is preserving nature and equality in the natural world, which is fundamental. But that does not automatically justify using education simply to manipulate people into thinking or acting a particular way. There are other instruments for behaviour change — regulations, laws, fiscal incentives — and I found the use of education for direct behavioural manipulation problematic.

This led me to reflect on autonomy and self-determination. Critical aspects of being human include a sense of autonomy, agency and self-determination — the capacity to have a say in who you are and who you want to become. Over time, I shifted from the instrumental view towards a more emancipatory orientation: education as capacity-builder, enabling people to reflect, to interrogate themselves, to question and to engage in critical thinking. Socially critical perspectives became more central, alongside the idea of developing an action competence so that people can influence their own lives and the world around them.

Consequently, I moved away from forms of environmental education that focused narrowly on environmental literacy — namely, systems understanding and awareness of degradation, resource exploitation, and toxification. While that knowledge is important, it is not the ultimate goal of Bildung. Bildung represents an emancipatory vision of education. I began to question the notion of autonomy itself and to re-examine subjectification, as discussed by Gert Biesta. We are, I argued, formed at the mercy of relationships. Who we are is shaped by our relations with one another and with the material world, including non-human nature, and nature is part of us.

I therefore came to think relationally about what it means to be human within ecological boundaries. Cotonomy brings together a relational view of the self — as an emergent property of interactions — with the aspiration to retain something that is uniquely one's own: self-determination. From a relational perspective, full autonomy is elusive; "I am" becomes "I am because we are." Awareness of this entanglement is critical for sustainability. When we move to citizenship and global citizenship education, what is needed is critical awareness of our entanglement with others, with relationships we have or have lost. Such awareness encourages more nurturing and caring relations with ourselves and the wider world; it cultivates solidarity and co-creation.

In this sense, subjectification must be constrained by ecological boundaries. We cannot sustainably or responsibly 'be 'or 'become 'if we ignore the subjectification of others — indeed, of the earth. The Earth arguably has its own pathway — a form of self-determination — which is being compromised by the human species. I prefer to speak of the Capitalocene rather than the Anthropocene because it highlights a specific mode of Western, colonising, extractive thinking that currently dominates. This is altering air quality, ocean currents, weather patterns, biodiversity and extinction rates. The fact that a single species can so rapidly alter systems formed over 4.5 billion years is profoundly damaging.

Subjectification, then, must attend to others — other people, other species, future generations — and global citizenship must address the moral compass required to navigate these entanglements. In the chapter we discussed yesterday, I introduced cotonomy as an alternative term to open a conversation about autonomy, eco-Bildung and eco-subjectification; it shifts attention to ecological integrity, other species and future generations. I hope global citizenship education, sustainability education and climate change education will converge around this relational understanding and the moral sensibilities humans need to survive and thrive — and not only for the fortunate few, but for all humanity.

Interviewer

Do you see tensions between these ideas and institutional or competence-based models of GCED, such as those promoted by UNESCO?

A. Wals

Yes, I do. Although UNESCO and the European Union emphasise systems thinking and a more holistic approach, there remains a tendency toward reductionism. Look at the Sustainable Development Goals: sustainability education, global citizenship education, and climate education are largely subsumed under SDG 4, which focuses on quality education. Yet the SDGs are divided into 17 goals, with competencies further broken down into sub-competencies and then into knowledge, attitudes, and skills. Is this not behaviourism in disguise? Are we not falling into the trap of believing we can neatly separate peace and justice, no poverty, climate action and life on land? In reality, these concerns are deeply intertwined, even if we find it convenient on paper to make distinctions.

The value of the SDGs is precisely in recognising their interrelationships. At universities, we analyse which goals our curricula address and then claim we cover them all. But the point is not to tick boxes; it is to see that you cannot discuss one topic without taking the others into account. Citizenship must be an awareness of how the local and the global are connected, how past and future are entangled, and how every 'wicked' problem has environmental, ecological and socio-ethical dimensions. Systems thinking — the idea that the whole is greater than the sum of its parts — is essential. Unfortunately, the relational complexity is sometimes compromised by the neat boxes and tables we create, which become a "check-the-box" exercise rather than an invitation to deep reflection.

Interviewer

You have written about relational and transgressive learning. What kinds of activities best express those ideas in the classroom? Could you give concrete examples, including what worked well and what was difficult?

A. Wals

One example from my own teaching is a course entitled *Environmental Education for Sustainable Living*. It typically has about 50 students, mostly at the master's level, with some third-year undergraduates. We begin by examining sustainability as a concept through a sustainability walk, which also serves as an exercise to get to know one another.

Students form small groups and are assigned a point roughly ten minutes' walk from the building. They have twenty minutes to walk there and are encouraged to slow down. Each group designates one student to take photographs. During the walk, they discuss and take a photograph of something they agree is sustainable; on the return journey, they take a photograph of something they consider unsustainable. The groups send their images to the teaching team, and we project them for discussion.

The exercise provokes lively debate because students come from diverse backgrounds: environmental science, agriculture, forestry, nature conservation, social sciences and the humanities. For example, an environmentally-oriented student might judge a granite equestrian statue as unsustainable because the stone was quarried and transported at high environmental cost. A social scientist might argue the same statue is unsustainable because it symbolises an exclusionary history — why are there statues of men and not women? One group photographed an aquarium: for some, it was unsustainable due to the tropical fish trade and the energy required for heating; for others, it represented a place where people slow down and connect with non-human animals. The point of the exercise is to demonstrate that 'sustainability' is multi-interpretable and contested; meaning is made collectively through dialogue.

We also design transgressive activities that intentionally surface inequalities and injustices people tend to ignore. At the Bildung Academy in Amsterdam, which separated from the University of Amsterdam because students were dissatisfied with traditional pedagogy, a module on empathy moved beyond readings and lectures. Students went into the city in small groups to identify signs of empathy and its absence. They looked for food banks, for people being ignored, for visible expressions of care or indifference. Rather than teaching empathy abstractly, the activity required students to notice the ordinary in a new way. Transgression, in this sense, is the act of questioning the normal and making the ordinary less ordinary; it exposes injustices and encourages collective discomfort. That group component is crucial: shared discomfort is generative, whereas solitary discomfort can lead to stress, despair and disengagement. We therefore need to help students tolerate and work productively with difficult emotions.

Interviewer

That's fascinating — I agree. Practical, hands-on activities help learners notice what busy lives usually obscure. This leads to my next concern: pedagogies of collapse. How can GCED help learners face difficult or painful truths about the world without tipping into despair? What role do trauma-sensitive approaches play? Yesterday, you mentioned virtual reality, slaughterhouses and pigs, which made me think about trauma. If you expose people to such impactful experiences, they might disengage.

A. Wals

This is a very important question and a vital concern. Corporations and other vested interests have created a culture of masking and shielding: consumers are kept from seeing what happens in fishing trawlers, sweatshops and slaughterhouses because visibility would provoke discomfort, protest and demands for change. In Europe, we at least have a legal right to know certain things — for example, labeling of additives — but having the label does not necessarily mean understanding the implications.

There are two dangers. One is deliberate concealment of painful truths. The other is exposing people without offering pathways for action. Becoming aware of distressing realities without the capacity to act can lead to withdrawal. Responsible education must therefore combine exposure with conversation and imagination. We should immerse learners in issues, create spaces to discuss what makes them uncomfortable, and work together to imagine alternatives. For instance, with food systems, there are many production models and dietary patterns to consider. We do not need to accept slaughterhouses as inevitable: alternatives exist, and transitions are underway in many places.

I often invoke the notion of ‘nowtopia’ — utopian practices that already exist. Local experiments offer hope: communities cooperatively store and share solar energy; local vegetable box schemes reconnect consumers with producers; cities such as Paris, Bologna and Medellín have found that reducing traffic improves livability, social cohesion and air quality. These examples are energising because they demonstrate that change is possible. Education should therefore combine awareness with what I would call active hope: enabling learners to make a difference locally rather than waiting for global transformation.

Interviewer

Your work also emphasises the more-than-human world. How can GCED meaningfully include non-human animals and multispecies ethics, rather than treating them as metaphors?

A. Wals

Global citizenship education is often human-centred, ethnocentric and anthropocentric. A post-human perspective recognises that other species exhibit exceptional characteristics and modes of communication that we may not understand,

and that there is distributed wisdom across species. Recognising the exceptionalism of all species is essential.

I think of myself as a multi-species entity: the bacteria in my gut, for example, are indispensable. Acknowledging entanglement with non-human life compels us to upgrade our notion of citizenship to include ecological citizenship: an embodied immersion in the more-than-human. At Wageningen University, we are creating an outdoor campus with sit-spots and sensory walks to allow students and staff to slow down, listen and attend to the more-than-human. Indigenous ways of knowing, which are often more relational, should also inform such practice. Nature connectedness and nature-inclusive education are critical components of a broadened global citizenship education.

Interviewer

Could you briefly explain how teachers might manage ethical conflicts between human and other species needs in the classroom?

A. Wals

First, elicit the ethical consequences of our actions and recognise how our behaviours limit other beings' ability to live and thrive. Awareness is the first step. The second step is dialogical: mirror your positions against others' and engage in conversation to find common ground. There will inevitably be trade-offs, which also occur in nature and can have an ecological function. The key is to think in terms of wider ecological systems. If you can justify a choice with reference to the health of the larger system and show that you have thought through the consequences for others, then the decision may be defensible. The classroom can be a space for learning how to hold those tensions and to reason ethically across human and non-human interests.