



ARTICLE

# Embedding Outdoor Relational Education in Academia: Perceived Barriers and Opportunities at a Dutch University

Koen Arts<sup>1</sup>, Paul Roncken<sup>1</sup>, Arjen Buijs<sup>1</sup> and Arjen Wals<sup>2</sup>

<sup>1</sup>Wageningen University & Research, Forest and Nature Conservation Policy Group, Wageningen, Netherlands and

<sup>2</sup>Wageningen University & Research, Education and Learning Sciences Group, Wageningen, Netherlands

**Corresponding author:** Koen Arts; Email: [koen.arts@wur.nl](mailto:koen.arts@wur.nl)

(Received 25 September 2024; revised 24 March 2025; accepted 24 March 2025; first published online 13 May 2025)

## Abstract

Calls for innovating environmental and sustainability education—including higher education—have been voiced for many years. New approaches are gaining traction, including the Wild Pedagogies framework and notions of rewilding education. A common denominator of these approaches is an emphasis on learning outdoors, and through a relational epistemological lens. Contributing to these developing approaches, this paper investigates the budding concept and practice of outdoor relational education at a university level, specifically Wageningen University (WU) in the Netherlands. Based on 31 semi-structured interviews with protagonists and other stakeholders involved in or affiliated with outdoor relational education at WU, we identify associations, key elements and perceived benefits. Our research provides insight into what outdoor relational education and associated concepts are perceived to be in this context, how they are engaged and what the key experienced opportunities and barriers are to implement outdoor relational education further at WU. Complementary to theorisations of wild pedagogies and related approaches, our results offer empirical illustrations of wild pedagogies “in action” in an institutional academic setting that is not necessarily conducive to such developments.

**Keywords:** Implementation; higher education institutions; wild pedagogies; rewilding education

## Introduction

Outdoor education as a field or discipline (Dyment & Potter, 2015) has historically played a key role in environmental education and the two are often seen as inseparable (Priest, 1986). Whereas outdoor education can serve as a way into environmental education, using the outdoors not only for personal development but also to instil a sense of connection to nature, environmental education often relies on outdoor settings to provide immersive, impactful experiences that deepen understanding and strengthen environmental advocacy and citizenship. There has been a wide range of pedagogical and didactical approaches, both within outdoor and environmental education varying from a more instrumental utilitarian approach (e.g. teaching and learning *about* and *for* nature and the environment, where the human actor is often seen as separate and special) to a more emancipatory relational approach (e.g. teaching and learning *in*, *through* and *with* nature and the environment, where the human actor is entangled and one species amongst many others who all have exceptional qualities) (see Macintyre et al., 2024 for an overview). The emancipatory relational approach centres around creating and/or looking for spaces for contemplation, inner-development and decentring the human to open up ontological pathways

that allow for more relational and caring ways of being. We will refer to this strand of outdoor education as “outdoor relational education,” which is the focus of this paper. Wild pedagogies—and outdoor relational education, here understood as an interpretation of that—seem to be gaining traction in higher education as a counter move against ongoing anthropocentrism, the commodification nature, the loss of meaning and hope, and the extinction of experience in the non-virtual world (Blenkinsop & Ford, 2018).

In this paper we zoom in on the implementation, or lack thereof, of outdoor relational education at a university level, specifically Wageningen University (WU) in the Netherlands. As a main research question, we pose:

*How is the concept of outdoor relational education perceived and practiced in and around the WU, and what are the perceived opportunities and barriers for further implementation?*

The following sub research questions are engaged:

1. *What are the associations with the concept by protagonists and other stakeholders, what do they identify as key elements, and what are the perceived benefits?*
2. *In which ways is the concept interpreted by protagonists and other stakeholders as university befitting and discipline specific?*
3. *What are the perceived opportunities and barriers for the further implementation of outdoor relational education at the WU educational ecosystem?*

## Theoretical background

Outdoor relational education tends to take on a whole of body approach in which the cognitive, affective and physical all play important roles, while also emphasising the importance of some form of “dialogue” with the natural environment. This is not a new idea. In indigenous contexts such an approach has been deeply ingrained for many generations (Berkes, 2017). In “Western” contexts we can go back at least 150 years. In Finland, for instance, in the 1870s, “educational sloyd” developed, in which crafts are a vehicle for both technical and formative development of young people (Whittaker, 2014). More recently, Gravett et al. (2024) discuss relational pedagogies from a posthuman perspective. They consider the creation of space through forms of education that centre on relationality within a broader network of human–nonhuman-material relations, to be critical. Their work, however, does not consider the potential of outdoors and associated embodied and immersive forms of learning as a breeding ground for such relationality. Here we might turn to the work of Blenkinsop and Ford (2018) and others who weave together relational, critical and existential possibilities of outdoor environmental education using the notion of wild pedagogies as a backdrop (Jickling, Blenkinsop, Timmerman & De Danann Sitka-Sage 2018; Morse et al., 2021; Quay & Jensen, 2018). The Wild Pedagogies framework asserts that “meaningful change will need to fundamentally disrupt dominant visions of education,” with pedagogies that “challenge us all to be better educators and allies of, for, with, and in the more-than-human world” (Jickling et al., 2018: 169). Jickling et al. (2018) propose six touchstones to think and experiment with: (1) agency and the role of nature as co-teacher; (2) wildness and challenging ideas of control; (3) complexity, the unknown, and spontaneity; (4) locating the wild; (5) time and practice; and (6) cultural change. Similarly, calls for rewilding education have recently emerged (Maffey Arts, 2022; Paulsen, Jagodzinski & Hawke 2022). Paulsen et al. (2022) emphasise the need for new pedagogical imaginations to deal with the challenges and potentials of the Anthropocene, and the crucial part that (wild) nature must play in such pedagogies. In a recent special issue in this journal on how the acknowledgement of relational ontologies and multispecies

worlds offers transdisciplinary possibilities for environmental education, this is affirmed in several contributions (Riley *et al.*, 2024).

In this paper, we build on these approaches and especially the Wild Pedagogies framework. Our specific focus is on outdoor relational education as one potential element of wilding pedagogies.

While more conceptual and practical work is being done on creating and searching for pedagogies that afford relationality and human-nature connections, relatively little attention is paid to the capabilities of, and opportunities for educators to enact such pedagogies. Often, the individual commitment of educators is clear, but the institutional pathways for change less so. From broader literatures around institutional change, it is well-established that organisations, including schools and universities, are slow in abandoning old ways of thinking and organising. Sterling recently identified ten so-called “lock-in”s that keep such organisations from the radical re-orientation needed to create more sustainable futures (Sterling, 2025). An underlying question is also what one expects (or can expect) of organisational change in a broader sense, and from what kind of broader framework barriers and opportunities are judged as such. Tarter and Hoy (1998) have conceptualised this aptly in their detailing of several organisational decision-making models. These range from a *classical* one in which the objectives of an organisation are guiding all means-ends analyses, and in which all solutions are optimised. By contrast, the so-called *garbage can* model asserts that means and ends are generally independent and at best connected by chance, while the *incremental* model highlights organisational capacities to “muddle through” in situations with incomplete information, uncertainty about outcomes uncertain, lack of guiding principles and mostly short-term strategies (Tarter & Hoy, 1998).

Ultimately, insights around implementation of sustainability pedagogies at various educational levels, are diverse and advanced. Yet, when specifically considering the embedding of outdoor relational education at university level, the knowledge on the barriers and opportunities of implementation becomes thinner. In the next section we explain our method to address this gap.

## Methodology

### *Situational context*

There are 14 public universities in the Netherlands, and the WU is one of four technical universities. The WU positions itself as the university of life sciences, offering 20 BSc and 31 MSc programmes in the three self-determined WU domains (Food, feed & biobased production; Natural resources & living environment; Society & well-being). In these domains, the WU is often ranked a top university (e.g. QS World University Rankings 2024, #1 in Agriculture & Forestry and #2 in Environmental Sciences; National Taiwan Ranking 2022, #1 Agricultural University, #3 in Environment & Ecology). Within the Netherlands, in 2024 students voted the WU as the best university in the Netherlands for the twentieth time in a row. In the Green metric Universitas Indonesia 2023 ranking, the WU is #1 Most Sustainable University in the World. The specific focus of the WU is also visible in its mission; “To explore the potential of nature to improve the quality of life.” In the academic year 2023/2024 the WU had total of 13.564 students (5661 BSc students, 7284 MSc students, 112 pre-master, 507 exchange students), of which 9847 Dutch (73%) and 3717 (27%) international students (primarily Chinese, German and Italian). In the same academic year, there were 2463 PhD candidates and 7044 employees (in fte) (WU website, 2025). But arguably, the focus on ranking and numbers and their use for marketing purposes, can be seen as a sign that the university is still adhering to a performative paradigm focusing on productivity, quantitative assessments and appearance to the outside world. Being the “most sustainable university in the world” and then telling the world in a way contradicts the whole notion of sustainability. When we zoom in on our own everyday practices within WU we do see highly motivated students and staff with a desire to make a difference, as well as niches of exciting and even disruptive forms of education and research. We also see deeply entrenched cultures of

measurement, control and accountability that prevent these niches from moving from the margins to the main stream. One emerging niche within the WU context is that of outdoor relational education.

In order to find answers to the overarching research question of *How is the concept of outdoor relational education perceived and practiced in and around the WU, and what are the perceived opportunities and barriers for further implementation?*, we interviewed staff members who are connected to one or several of the initiatives in the area of (roughly) outdoor relational education that have been developed of late. On a course level, there are several free electives (not directly part of a BSc or MSc programme). *Wild perspectives* (FNP51803, since 2021) seeks to develop sensitivity to more-than-human perspectives. *Anthropology of basic nature skill 1 and 2* (respectively FNP51306, since 2021; FNP52306 since 2024) centres around traditional ecological knowledges and bodily engagement with the natural environment. *Exploring Regenerative Culture for Sustainability* (ELS58303, formally since 2022) engages regenerative, empowering approaches to get to grips with the psychological and social consequences of unsustainability. *Ecological design and permaculture* (FSE50306) teaches students, through co-design, about organic and nature-inclusive approaches to small-scale food production. Meanwhile, other courses, initiatives and developments relating to transformational change increasingly have come to the fore. These include the appointment of a Special Professor in Human-Nature Relationships in the Anthropocene, which follows from a cooperation between the WU and the Dutch foundation NatuurCollege (NatureCollege), the establishment of the so-called Transformational Learning Hub, the Wageningen Biodiversity Initiative, The Restoration Education project (in cooperation with the Global Landscape Forum), the course *Grand Challenges for the Governance of Sustainability Transformations* (YSS38206) and the PhD Courses *Transformative and Participatory Qualitative Research Approaches*, *Transformative Research for Global Social-Environmental Challenges*, and *Human-Nature Relationships for Transformative Change*. Since the fieldwork of this study was conducted, “Nature inclusive teaching” modules have been developed for WU teachers from any scientific discipline, as well as a related living lab that funnels a variety of grassroot initiatives. But notwithstanding the richness and vibrancy around outdoor relational education at the WU, no overarching policy or guideline exists that channel or stimulate these developments.

### **Research approach**

To answer the research (sub)questions, 31 semi-structured interviews with protagonists and other stakeholders were conducted (see Table 1). The informants were approached through purposeful sampling based on (i) their substantial involvement in current outdoor relational education activities within the WU or somehow connected to the WU; or (ii) their prominent role in the WU educational ecosystem, which would make them decision-makers of sorts in the potential process of further implementing the concept. The selection occurred based on the first author’s knowledge of the WU network. Out of 33 invitations, 2 were declined. 25 interviews were held in English and 6 in Dutch, all in the period between June and September 2023. Most interviews were conducted online. Generally, interviews took between 20 and 30 minutes. Interviews were recorded, transcribed, and primarily inductively coded with ATLAS.ti 23 software. This inductive coding of the data was preceded by pre-formulated but open interview guide with questions within the general categories of “exploring outdoor relational education,” and “challenges and opportunities for implementation.” Interviewees participated on the basis of Free, Prior and Informed Consent, and all agreed to the recording of the interview. Participants were promised anonymity (the first interviewed informant is indicated as “I1,” et cetera). In the following Results, citations have been minimally edited; non-functional repetitions were deleted, as well as stopgaps and fillers (“I think,” “well,” “yeah,” “you know,” “uhm,” “euh,” “hmm”). The aim of this editing process was to

**Table 1.** Overview of interviewees' professional roles

Interviewee	Professional roles (within WU unless otherwise indicated)
I3, I12, I21, I27 I29, I31	Course coordinator or representative of outdoor relational course, or course with outdoor relational learning elements
I4, I5, I8, I15, I25	BSc/MSc programme director or student dean
I1, I2, I17, I19	Graduate or PhD student involved in WU outdoor relational education
I6, I9, I10, I11, I13, I16, I18, I23, I26, I28	Staff member from a chair group or in-house organisation who has experience with or previously expressed a strong interest in outdoor relational education
I7, I14, I20, I22, I24, I30	Affiliate of other education institute involved in outdoor relational education (sometimes in direct cooperation with WU)

maximise understanding for the reader without losing original intention by the interviewee. The results are structured along the topics of the three sub research questions.

## Results

### ***Associations, key elements and benefits***

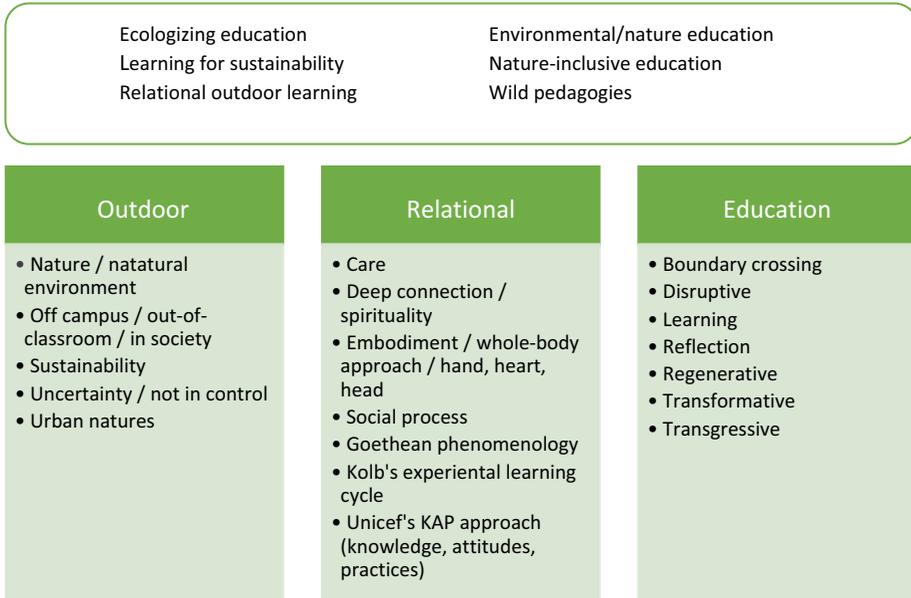
In the invitation emails to potential interviewees, and at the start of the interviews, we briefly introduced the concept of outdoor relational education as a “working” concept that—for us—included more or less the following interrelated elements: (i) foregrounding the outdoors; (ii) an approach that includes cognitive as well as physical and emotional dimensions; and (iii) deconstructing “modern” dualisms and emphasising process and relation development. The informant was subsequently asked whether this resonated with the terminology and components that they might use. Various interpretations and related concepts emerged (Figure 1), with interviewees denoting recognition and emphasising similarities as opposed to drawing sharp boundaries between concepts or rejecting the notion altogether. With the interviewees we then dived into the detail of the components that they understood as pivotal in this concept of outdoor relational education in its broadest sense (Figure 1). We chose to organise the findings along each of the three words of outdoor relational education, starting with “outdoor.”

### *Perceptions on “outdoor”*

The use of the word “outdoor” in this context may at first seem less obvious than for instance “nature.” However, as interviewer we tried to use the word “nature” sparsely for the same reason explained by I16:

“( . . . ) I don’t like the term nature very much anymore because as soon as we use it, we already build in a dichotomy.”

While this also holds true when using the word “outdoor” (versus “indoor”), it comes with a less problematic cultural luggage of separating humans, or culture, from nature. Still, often “outdoor” and “nature” were used interchangeably, and a large majority of interviewees were thinking of a more natural environment as the best place for this kind of education; “the first thing is really the setting ( . . . ) where you actually can have that relation with the natural environment.” (I3). I16 further explained:



**Figure 1.** Interviewees' associations related to the concept of outdoor relational education. At the top the more comprehensive didactic frameworks mentioned. At the bottom associations primarily related to a specific component (lists alphabetically ordered).

“If you sit in a classroom and learn about nature, what you only use there is cognition and rationality. When you are outdoors, when you are in nature, all your senses are awakened so that automatically your contact with the world becomes much more multifaceted. (. . .) There is an embodied experience which involves all your senses and your physical being when you are out there.”

I11 and I10 also emphasised the notion of “nature as a teacher.” I10 related this to the “voice of nature” that is not enough taken into account in an anthropocentric world view. In several cases a contrast was painted with education in classrooms. I20 also linked this to lack of control outside (“I am not totally in control. It feels if you are inside, you are more in control.”), which they saw as a positive thing. I30 expressed a similar line of thinking along the notion of uncertainty in the outdoors and how it sits at odds of trying to control learning objectives:

“Try to get away from that notion of we have got to cram in this, this, this and this because this is what the learning outcome say and this is what the assessment requires and so on, because you cannot do that when you are outside. You know, if it decides that it is going rain really hard and the wind is going get up for a week, you are going spend a week dealing with and interacting with those elements. And the effects it has on the ecology and environment around you and the emotions of the people with you, that is going take up much more of your time (. . .). You might not hit those learning targets that you have written down. You know, as a nice idea.”

I6 explained that current traditional classroom are not optimally designed for learning, because “learning occurs through all senses and not just in the head.” Moreover, I6 continued,

“So especially if you want to learn about sustainability, about care for nature, about other things than what humans do, I can imagine that [an outdoor classroom] is really helpful. Of course, if you have other goals, then you might wonder if that is the case. [But] then still I could imagine that some relaxation or taking away some of the stressors basically can enhance or help the learning in that case. Or maybe the pace of learning might be that slowing it down sometimes also is good for reflection, et cetera.”

It was also pointed out that a natural outdoor setting may be beneficial because of its no- or low-tech character, which would “empty your head to use it” and thus offering “more capacity on thinking more deeply” (I4).

I14 emphasised that we should not only look at nature in nature areas, thus potentially forgetting our surroundings or non-human beings that live outside of nature reserves. “We need urban [nature] inclusive education,” they argued, because then “then it can become [accessible to] everyone.”

#### *Perceptions on “relational”*

All interviewees implicitly or explicitly endorsed the notion that optimal learning involves the cognitive as well as the affective and physical faculties of the learner. Moreover, it was stressed, the learning that then occurs, results not only in more creative or better knowledge retention spans.

For the interviewees, the “relational” upshot of employing the affective and physical faculties plays out on various related strands. Returning notions were tightly interwoven, but included: connection, relationships, emotion and intuition, sustainability ethics, and care. I10 illustrated the value of relational learning in the outdoors:

“I can understand why it is important to take care of nature. I can understand why I am part of the system and I should view myself as such, but if I do not feel it at an emotional level, then I will probably not act accordingly.”

Talking about emotions, many interviewees felt on the backfoot in the university context. “Dealing with emotions [is not] seen as something that should be in a scientific and an academic programme” observed I15, “and I do not agree. I do not agree on this.” Indeed, various interviewees pointed out that emotions were instead a prerequisite to establish connections or relationships with the non-human environment, and that the absence of such connection was a root cause of environmental destruction. Three interviewees used the word “spiritual” in connection to the importance of emotions. When asked, I12 defined it as “what one believes about the world and experiences which are difficult to capture with the material or factual terms that we have.” I11 linked the notion of spirituality to an existential dimension of “being in nature”;

“It starts with your relationship with the Earth. If you experience that connection, than you can start to act sustainably. If you act from a more technological stance, it inevitable leads to phantom solutions.”

Generally for the interviewees, “relational” referred, to begin with, to a “whole-body” (cognitive, affective, physical) approach to learning and education. This was then seen as a crucial foundation for establishing or nurturing a relationship with the natural environment. “Feeling part of nature” (I1, I11) was a typical phrase emerging in this sense, which also linked to the question of who we are as humans (I1). Feeling part of nature sometimes also meant “feeling part of your body.” As I21 explained:

“I am a teacher for human and animal biology (. . .). What I absolutely emphasize is that we are nature and we are animals, and that every example that I give there applies to us and when it applies to us, it could also apply to other animals. There is no distinction in there and what I really try to do is get people back in touch with their own bodies and get them back in touch with their own physical being that they are. And that is difficult because they are so tuned in into their mobile phones and (. . .) finances and work and jobs and everything.”

The connection was readily made between “feeling part of nature” and ethical dimensions such as “caring” or making sustainable daily consumer choices. I12 explained that outdoor relational education was for them much more conducive to the development of an ethic than traditional ways of learning:

“When I approach matters relationally, I can get much easier to a sense of what is right.”

The “feeling part of nature” sentiment may also feed into, what could be labelled as ontological modesty.

“The recognition that your world view is just your world view and nothing more than that, nothing less. (. . .) But the recognition that it is not a truth, (. . .) not something that is more important than another person’s worldview (. . .). I think if that is more part of education, I think that would solve a lot of issues.” I10

The practical establishment of relationships between learners and the outdoors was generally not seen or experienced as challenging. Spending “relational time” in a more natural environment—alone through assignments, or learners and teachers together—was generally seen as an obvious way to go. Such situatedness was connected by I14 to a necessity for didactic adaptability to changing circumstances (seasonality, weather, appearance of animals, et cetera). I28 stressed that the learning process itself should also be understood as dynamic. They emphasised the power of learners going through all stages of Kolb’s experiential learning cycle.

I9 and two others emphasised the importance for learners to connect to a specific place, for instance through returning visits over a longer period when possible.

After the “whole-body” approach to learning and thereby connecting to the outdoors, a third element of the relational that emerged was the social process implied in this type of education. This may start with, and build on, personal approaches of the teacher towards students. But the group dynamics was emphasised by many as pivotal. I14 captured the answers of several interviewees by stating:

“[The idea] that you as a person can only shine when the people in your group are shining (. . .) I think this mini society you are building, that is a very important part.”

Indeed, outdoor relational education as understood by the informants involved building relationships with fellow students in “safe spaces” (I3) actively maintained by the teachers.

### *Perceptions on “education”*

Interviewees’ ideas, experiences and insights in relation to the “education” part of outdoor relational education diverged, yet were always connected to, and usually followed on from the earlier discussed notions around “outdoor” and “relational.” The idea of care was mentioned by several interviewees and, as I3 illustrated, plays out on multiple levels:

“It is a caring learning space, but in the end also a practice of care for the environment.”

Many interviewees understood learning as a trajectory of autonomous and personal development as opposed to an act of linear knowledge absorption. For example, I2 stressed the importance of teachers experimenting with learners, while I1 mentioned the need for teachers to facilitate “wonder,” with students developing “a curious eye when outdoor” and tapping into their intrinsic motivations. I7 paraphrased the saying that “education is not the filling of a pail, but the lighting of a fire,” and elsewhere in the interview mentioned that they sought to develop in students “the mastership of observing instead of reproducing.”

Also the empowerment of students was mentioned frequently. Empowering learners, ultimately so that they become better professionals and humans in dealing with environmental crises. As I15 stated: “We really have to help [our students] to feel empowered.” This fits with a broader development at Wageningen that I6 observed:

“[I] see more attention for things like tensions, dilemmas, difficult-to-solve problems. Problems that have a deep ethical side to them. I see (. . .) growing attention for not just knowledge and skills, but for what I would call professional identity development so that learners learn to understand who they are and why they choose for certain topics.”

The empowering element went hand in hand with a general ambition of outdoor relational educators to have long-term impact, well beyond the running of the BSc or MSc programme.

Perceptions on “education” become also more visible when filtering out the perceived benefit of outdoor relational education (which was generally linked to what informants deemed as important elements of such education, as discussed previously). From the interview data, six main benefits came to the fore: Improved learning; Personal development; Social development; Understanding humans, also in relation to outdoors; Health and wellbeing; More sustainable thinking and action. The last mentioned benefit was deemed a lynchpin of outdoor relational education. It is normative in that it assumes that both research and education—especially at a “green” university such as the WU—cannot solely be descriptive (measuring, observing, analysing) considering accelerated biodiversity loss, climate change and other global environmental crises. The WU, it was argued, must take responsibility in the required sustainability transition and this required prescriptive and relational education too. I16 captured this sentiment as follows:

“If we want to build a world that is sustainable, we need both. Just understanding does not seem to be enough. We also need to relate and that needs to become a crucial part of our educational system.”

This lynchpin was directly connected to a second perceived benefit, “Understanding humans, also in relation to outdoors.” This revolved around “finding our relation back to who we are, also in relation to nature” (I1) and tapping into the “inner voice” (I17). Science played a big part in this, for it is through many scientific disciplines, from psychology to political studies to evolutionary biology that we learn about the “nature” of humans. This developing insight should then be used to reposition humankind in the web of life; no longer a destructing dominator but an influential yet modest species. As I19 put it:

“It is absolutely necessary that we get this holistic approach and that we start seeing the forest again instead of the trees. So, this getting out of these hyper specialized holes, these super deep tunnels that we dug and then being able to see the sort of systems approach, all the laws that are underlying the different systems and that is that which we compartmentalize but which are part of the whole thing.”

Understanding ourselves better as humans, in combination with a better connection to the outdoors, was thought to also lead to “better connection with other humans” (I5), as well taking more responsibility for social systems (I13). I4 pointed out a practical benefit: it brings back more balance in the class “because you have people who are less fond of being inside, and the opposite,” and currently the latter are most catered for.

As illustrated by a quote from I14 in the previous section, social and the personal development were thought to be tightly interwoven. The range of perceived benefits under personal development went from: space for wonder, curiosity, empowerment, embracing diversity, to nurturing freedom, taking up responsibility, developing ethics, connecting to an intrinsic motivation for learning, and strengthening self-confidence. I7 summed it up as “[this] inner development that we would need to promote in each of the students” so that ultimately, they would “have discovered themselves [first] instead of the world.”

“Health and wellbeing” was in turn linked to personal development. Interviewees saw spending more time outdoors as beneficial to any learner, in terms of slowing down, relaxation, moving away from screen time, inspiration, fresh air and so forth. Ultimately, the perception was that this all feeds into “improved learning.” Some argued that the analytical capabilities become stronger through outdoor relational education. For instance, I30 commented:

“A lot of my students will comment when I take them out to do bushcraft type activities, how they have learned more about the ecology of a place by building a shelter there, then they would have by looking in a book.”

But most interviewees emphasised benefits for the learner that go beyond the purely analytical, including deeper learning, more creative insights, better retention of knowledge, and improved metacognition (knowledge about acquiring knowledge).

### **University befitting and discipline specific?**

Next to the understanding and relevance of outdoor relational education, we were also interested in how educators position this within university, and within disciplines. A large majority of interviewees argued that this type of education should have a place in all stages and at all levels of education, from primary school to lifelong learning trajectories, and this included university level education. More so, a couple of interviewees argued that it should *especially* feature in WU education for the very reason that many graduates “can get a position in society where they can make some difference” (I5). Implied in most answers was a transgressive element, a critique of how universities in general currently operated. Referring to the UK education system, I30 stated:

“I think at a time when our house is going to burn down (. . .) environmental crisis, (. . .) tipping points, et cetera. there has been no shift at all. In what world are we educating people for and how are we equipping (. . .) young people to act effectively or efficiently? Or just even sort of stand a chance of being able to think about and feel and interact in new ways with the environment.”

Zooming in on Wageningen University, I16 said:

“[It] is a very specific university, and the whole emphasis on objectivity is maybe even stronger in Wageningen than in other universities.”

The observation was also applied to a very practical level. I30 pointed out the idea of the “classic” outdoor excursions: “Whilst they seem to have gotten used to the idea of get them outside to do field studies (. . .) there is no relationality in it, it is object-subject. It is not subject-subject.”

I1 said that “university education is now really cognitive” and I1, I2, I5 and I9 explained that both science and education would benefit if the relational element became stronger.

Tapping into a more philosophical discourse, I16 drew on the work of Ulrich Libbrecht on comparative philosophical systems around the world. All cultures, I16’s interpretation went, have created a first paradigm of separating, labelling, and naming. This is learned from a very young age, and the current Western scientific approach is the summit of this first paradigm. The second paradigm then, captures a moving beyond being “observing subjects in an objectified world” (I16); it is all about how cultures *relate* to the world. I16 concurred with Libbrecht that this is not about downplaying the value of science, but about combining the paradigms. The danger of always listening to the first approach, is losing our connection to the world. I16 saw this as “maybe the greatest challenge of our civilization”; we know in detail what is happening to Planet Earth, “we have objectified the world in such a way that we understand exactly what is wrong, but we cannot help ourselves anymore.” (I16)

At stake here is an epistemological question of what science is, how it should be employed to learn about realities, and what the remit of science should be in light of current environmental crises. As I11 put it:

“It is tricky that this [relational side] is left out of science. That is how I experience it now [but] luckily there are more and more people who do realize these are not at odds. Indeed, this side is even a condition to become a good scientist.”

Informants were also asked about whether outdoor relational education is only suitable for specific scientific disciplines. It was noted by several interviewees that it fits some disciplines better, especially those connected to ecology, nature conservation, biology and other environmental sciences. Yet, as I15 stated: “I am pretty sure that everyone will benefit from it.” Indeed, almost all interviewees explicitly stated something along the lines of “all disciplines could use a little bit of this” (I2). The differentiator revolved around *the extent* to which outdoor relational education should be part of any WU programme. I6 underpinned this as follows:

“( . . . ) At least some basic level of being acquainted or being offered education in this respect would be good. ( . . . ) It is the same as that we say all students to some degree should be able to have some entrepreneurial skills. So they need to be able to deal with uncertainty. They need some kind of creativity. They need to be able to see different opportunities. I mean, it is not that we want to make all students entrepreneurs, but we do want to give them that perspective and I think it is the same with this topic.”

I17, I19, I21, I29 and most other interviewees were also in favour of such a baseline for every WU student, which I7 motivated thus:

“All students in Wageningen are taking up responsibilities in their professional life, in acting in the world, or designing in the world or managing ( . . . ). And that is an important attitude for humans anyway, you have a relationship with the world, which is self-developed instead of just put into the brain ( . . . ).”

Ultimately, as I26 maintained, outdoor relational education has something to offer to any domain or discipline:

“( . . . ) We are in our domains [like] forest conservation or ( . . . ) political geology ( . . . ) that is maybe more obviously relatable ( . . . ), but I think every study can and the fundamental theory is to form meaningful attachment to the subject. And why is that important to me? ( . . . ) because the knowledge we build around the subject and the decisions we ( . . . ) make on

that knowledge, they have impact. They have relevance. They matter and it is very difficult to build knowledge on something without having some kind of a sense of it. I would say that is only half the knowledge.” (I26)

### **Perceived opportunities and barriers**

Several interviewees painted contextual developments at the WU, some of which related to the perceived opportunities and barriers. I6 sketched the contours of expected changes in the short-term future.

“I think education will become more flexible. In terms of curriculum, in terms of choices. And with that, I think you we will see a growing need for coaching supporting [such] orientation, this focus on professional identity development. With these two things also there will be a growing attention for the more affective side of education also because you could say the shadow side (. . .) people care for climate, people care for the difficult technical things. But at the same time, people get scared by them. They get anxious, they get depressed. Sometimes they also see that things will not work. So I think more attention for that and being able to deal with that, that is something that I foresee.”

To this, the interviewee added that they expected more attention to be given to the ethical side and entrepreneurial side of learning, a diversification and specialisation amongst teaching staff, and more blending of BSc and MSc learners with lifelong learners.

### *Perceived opportunities*

The opportunities that emerged from the data may be presented on a spectrum from abstract to concrete (Figure 2). Many interviewees recognised at the WU some desire for change; “amongst lecturers and students, there is a big wish in longing for (. . .) changes (. . .) in the education what we offer” (I23). I3 observed a positive environment for bottom-up initiatives and observed that “the WU, at least to a certain degree, is willing to . . . well, let experiments happen. So I think all that is beneficial.” According to I5, this “do it and see how it works out”-approach has always been in the culture of the WU. The observed experimentation allegedly so far played out primarily on the level of smaller elective courses. I7, I9 and I13 mentioned an open attitude amongst some WU decision-makers, but also stressed that this was “not representative of the university at large” (I9). Still, I9 noted a general openness for relational approaches in WU education. They said that while the WU as a whole did not quite act upon it, they saw it increasingly emerging on the agenda. I4 pointed out that the health and well-being benefit was something that WU decision-makers would be particularly interested in.

Another opportunity category was that of the “large demand by students” for this type of education. I15 saw that students changed.

“COVID perhaps triggered things a bit, but I guess it was already taking place. What we now see is that students are way more willing to actively position themselves and actively . . . actually act. (. . .) They feel they feel committed. They feel angry. They feel whatever they feel because we do not do what they think should be done (. . .). I think that the education did not really change over the years that much to keep pace with the changes in the student population.”

This shift at the WU was not taking place in isolation, according to informants. It went hand in hand with society-wide trends. I14 observed:

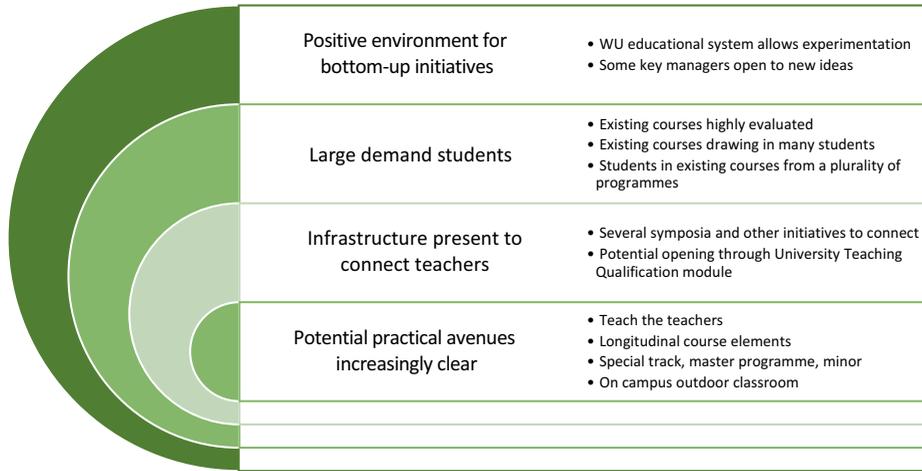


Figure 2. Perceived opportunities for further implementation (most abstract starting at the top).

“When I started this ten years ago everybody was like, why would you do this? So there is a big change, and a lot of [education institutes] are saying we definitely want something like this.”

It was also pointed out that existing courses were very positively evaluated by students and were generally popular, sometimes oversubscribed. In addition, they generated interest from students across the BSc and MSc programmes, again indicating a wider trend.

Various interviewees mentioned the presence of an “infrastructure to connect teachers.” “There is more awareness in general about it,” observed I5. Others pointed at the various initiatives at WU including workshops, dialogues and other exchanges, which had been drawing quite some interest. Yet, many agreed that this connecting between teachers needed to unfold further. I2 stated:

“There are many skilful people out there that are sometimes a bit invisible. And I think many beautiful initiatives are often a bit invisible. So you have to look for these initiatives and then we can learn a lot.”

One potentially productive avenue that some mentioned, was through the WU inhouse education training programme, i.e. the WU University Teaching Qualification, to which—the suggestion was—perhaps an optional module around outdoor relational education could be added.

On that very concrete opportunity level, several “potential practical avenues were increasingly clear” for protagonists. The “teach the teacher” idea popped up here and there, sometimes linked to the earlier mentioned WU University Teaching Qualification. Longitudinal course elements that run through various stages of a BSc or MSc programme were also mentioned. The modest premise here was that instead of overthrowing or redesigning entire programmes, introducing a small baseline of outdoor relational education for every WU student could have a very significant impact already.

By contrast, it was also observed that increasingly there were students who wanted to specialise in outdoor relational education but were currently ill-catered for. A designated minor, special track or even MSc programme around this topic was expected to fill a current gap.

Finally, the ongoing development of an on-campus outdoor “classroom” was mentioned, with various people being optimistic that this would become reality sooner than later, and that it would be both a practical and symbolic step in the right direction.

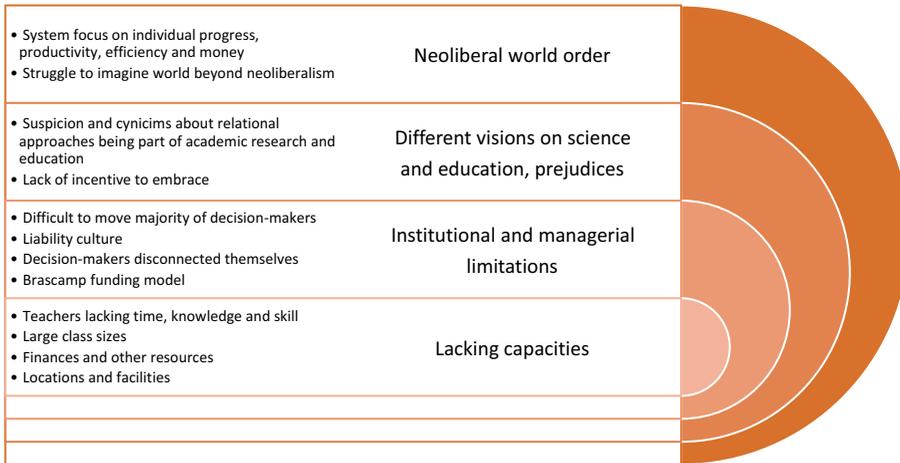


Figure 3. Perceived barriers to further implementation (most abstract starting at the top).

When discussing such potential avenues, a couple of informants stressed that these were not mutually exclusive. Indeed, some diversity and plurality of activity would be a good thing, as I16 argued:

“It is all of those. (. . .) You need more than just one approach.”

*Perceived barriers*

Arranging the barriers along a similar spectrum from abstract to concrete (Figure 3), the notion of a “neoliberal world order” emerged first. According to various interviewees, neoliberalism determined to a substantial degree what happened at highest level, and also in WU decision-making. I10 captured this thought as follows:

“The whole system is still very much focused on individual progress, productivity, efficiency and money, and as long as that does not change, then I think values such as quality of life, happiness, nature, creativity, emotional intelligence . . . it would be a difficult to make them important (. . .).”

It was argued by I9 that humankind’s attachment to this system goes so deep, that alternatives could hardly be imagined.

The topic of “different visions on science and education, and prejudices” featured prominently. I16 said:

“I have nothing against objective science. I think it is a perfect way of approaching the world, but just one way. [Many scientists] feel quite suspicious of other ways of approaching reality. That is for artists. That is for poets. That is not a science.”

I7 thought it was a shame that relational approaches to education were often perceived as

“something that you can do in your own time and [not] crucial for developing adult humans. (. . .) there is a sort of non-spoken language within university that the intellectual capacity is the most important thing of learning. If you know the laws of thermodynamics, (. . .) the

laws of social behaviour and the laws of psychology than you know how it works in the world, which is not true.

What some labelled as “suspicion” (I16), others labelled as “cynicism” (I10), or described the phenomenon themselves in cynical terms (I9, I17, I21, I31). In any case, as I6 remarked, any push to new types of skills or competencies

“is always difficult also because people think it lowers the level or something so that we become more a [university of applied sciences], which I think is not true (. . .).”

A different vision on education also emerged through the topic of examination and recognition of outputs. I27 explained:

(. . .) The recognition-for-words system within the university that values particular kinds of cognitive outputs and eclipses any others as potentially valuable contributions within the sphere of the university within the sphere of academia. So unconventional outputs or unconventional processes that might engage other ways of knowing or being are not widely celebrated or regarded as being valuable.”

A lack of incentive to embrace relational approaches was also mentioned. I13 explained that the focus is too much on comparing metrics in rankings and evaluations—again a neoliberal tendency. If those metrics are good, which they generally are for the WU, then why change anything, I13 asked ironically.

This problem linked up with a third main barrier, “institutional and managerial limitations.” I1, I9, I23 and others argued that many WU higher-level decision-makers on education were hard to move to embrace something like outdoor relational education. The lack of incentive for decision-makers—as featured under the previous barrier—also popped up here. Perhaps partly connected were a couple of observations that most people at the WU, including decision-makers, were disconnected themselves from the natural environment, and would thus unlikely champion change towards reconnection. I4 mentioned the liability culture standing in the way, as for outdoor education there are different and more risks, or in any case there is generally less experience dealing with those. The WU course funding infrastructure (using the so-called Brascamp model), as well as the complex nature of any changes to BSc and MSc programme planning, were also mentioned as important barriers. I15 illustrated:

“We try to change and update [a BSc programme]. It is a hell of a job to redesign it because courses are part of several programmes for instance. So [one] programme likes this, the other wants to emphasize something else.”

I15 then continued by saying that teachers have been overloaded for years, not just by COVID. This connected to the next and most concrete perceived barrier, that of “lacking capacities,” which could be split up into several subcategories. Teachers lacking time, knowledge and skill was an important one. Especially because, as various people pointed out, it is not always obvious—if there is a such a desire in the first place—how an educator can apply outdoor relational approaches to one’s discipline or specific topic.

Large class sizes were deemed a challenge for the WU educational system full stop. As I3, I25 and various others pointed out, outdoor relational education tends to require a student group that is not too big. A group size of maximum 20 students was mentioned a few times as well-manageable still. This for practical reasons, e.g. operating in the field, as well as for reasons of creating a personable setting to build relationships between teachers, students and the natural environment. A couple of educators mentioned that the current WU funding of their smaller

elective courses was hardly adequate because this type of education is more labour intensive. I14 observed: “If we see it as an add-on then [there tends to be], no money [and] no time.”

The most practical barriers at the WU mentioned was the absence of accessible and appropriate locations on or near the campus. But there was also some optimism that this would change in the nearby future.

### *Optimism?*

On balance, interviewees were rather optimistic about the implementation of outdoor relational education within and outside of the WU. I9 spoke of the *Zeitgeist* changing in favour of such developments. I16 explained that universities tend to lag behind developments in society, where “something is changing.” I5 said “we are in a big human personal development period. (. . .) It is time for different ways of learning.” I2 also sensed that there was more and more attention but was cautious to accelerate developments too much;

“Speed [of implementation] always makes me a bit anxious because when you are trying to make things faster than you sometimes lose the point of it.”

At the WU specifically, I1 talked of the small steps that were unfolding, and that they were sometimes painful steps. I3 indicated:

“I am quite optimistic with what I see happening. We just started experimenting and we found a space for that and I see it is really appreciated.”

On the other hand, I8 would not call the developments a trend yet, and I13 saw change mostly in the margins. The latter however sensed that key WU decision-makers were starting to move as well. I4 was eager to get those involved who were currently not, and was keen on ensuring that the developments and changes would not become too “activist.” In a similar way, I16 wanted to make sure traditional education paradigms were not dismissed as “not good or too narrow.” Rather, they suggested, it is about combining and embracing “various ways of approaching the world.”

## **Discussion and conclusion**

### ***Understandings of outdoor relational education***

The purpose of this research was to answer the question: *How is the concept of outdoor relational education perceived and practiced in and around the WU, and what are the perceived opportunities and barriers for further implementation?* The interviews with protagonists and practitioners at Wageningen University revealed a rather coherent understanding of outdoor relational education and the constituting elements. First, outdoor relational education foregrounds the **outdoors** so that this is not just a decor or an incidental space for education but a pivotal component. It takes a broad approach to “the outdoors”; it preferably takes place in a more natural setting, but could also unfold in urban locations, and could equally involve non-human beings that live outside of nature reserves. It concerns *learning about*, as much as *learning in* the outdoors, where all senses are part of a multifaceted learning process. Usually it has a no- or low-tech character. Ultimately and crucially, it relates to a normative position that seeks to promote environmental care and sustainability. Second, the **relational** generally plays out on at least three levels. It assumes that optimal learning involves cognitive as well as the affective and physical faculties of the learner. Further, such “whole-bodily” experiencing of the outdoors seeks to develop or nurture a relationship in which the learner is part of the outdoor. This in turn is geared to feed into ethics of care, sustainable consumption, and ontological modesty. We might refer to this as *learning with* and *learning through* the outdoor. Finally, the relational also refers to the learner and teacher

community; building social relationships in safe spaces is an important element here. Third, didactically, *education* is understood as needing to facilitate a trajectory of autonomous and personal development, that taps into a learner's intrinsic motivations, that empowers, and that has a long-term impact. The expected benefits of such outdoor relational education are sixfold: (i) More sustainable thinking and action; (ii) Understanding humans, also in relation to outdoors; (iii) Social development; (iv) Personal development; (v) Health and wellbeing; and (vi) Improved learning.

A specific topic that was discussed with interviewees was whether outdoor relational education is university befitting and discipline specific. In many ways, universities have been avoiding relational approaches through large parts of their existence, and opening up to that thus requires some kind of transformation. Regarding the question about discipline specificity, it was acknowledged that outdoor relational education fits the environmental sciences best, but it was generally thought that any learner from any discipline would benefit. The adoption of outdoor relational education at universities may be slower than in society or other educational institutes because it opens up epistemological questions of what academic education and science are, how they should be employed to learn about realities, and what the remit of them should be in light of current environmental crises.

The perceived main opportunities to enact outdoor relational education further at the WU were (from an abstract to a concrete level): (1) Positive environment for bottom-up initiatives; (2) Large demand students; (3) Infrastructure present to connect teachers; and (4) Potential practical avenues increasingly clear. But substantial barriers were also identified by interviewees, again starting with the most general level: (1) Neoliberal world order; (2) Different visions on science and education, prejudices; (3) Institutional and managerial limitations; (4) Lacking capacities.

### ***Institutional barriers and opportunities, and relationship with wild pedagogies***

Our findings resonate strongly with various investigations that somehow relate to outdoor relational education at university level, but which follow from a differentiated focus regarding pedagogy (e.g. blended learning, creative learning), didactics (e.g. learning and instruction, life effectiveness) or educational level (e.g. secondary school education, vocational education). The found barriers to optimal implementation correspond clearly with Moore's (2005) identification of disciplinarity issues and multiple priority-setting by the university's management. The frequently observed lack of integrated, holistic approaches (Leal Filho et al., 2017) is also visible in our findings. The large class sizes and lack of training opportunities and familiarity as found by Moula (2021) also featured in our case. Moula's notion of reputational risk does not resonate, which can perhaps be explained through I3 and I5's comments on the constructive WU culture of facilitating experimentation. The availability of infrastructure and general support (cf. Porter & Graham, 2016) for outdoor relational education at the WU is present yet seemingly below par, and were regularly framed by interviewees as opportunities or areas for development. The bottom-up nature of the developments around the WU paints a stark contrast with the "too much, too soon" sentiment that Cutting & Kelly (2015: 430) observed. Indeed, some interviewees were explicitly weary of such a trap. Issues with disciplinary silos (Parry & Metzger, 2023) seem fundamental at the WU too, and the call for commitment and creativity by Steinemann (2003) was, in various ways, embraced by many informants. "Tensions between professional identity" (Brownell & Tanner, 2012) did not come to fore as an important factor. The selection of the interviewees probably generated a sample of passionate educators, many of which in themselves are arguably "inspiring" figures for both students and staff (cf. Borg et al., 2012).

Employing slightly different terminology, our findings can feed into the wild pedagogies and rewilding education frameworks, offering empirical evidence for conceptual associations, identified key components, and perceived benefits. Further, arguments for why outdoor relational education and wild pedagogies should have a place at any higher education institution, regardless

of scientific discipline, have been reinforced. Our findings of what outdoor relational education is or should/could be, resonate with the six Wild Pedagogies touchstones. One element of differentiation, however, seems to be the emphasis in our findings on (an ethics of) care. This invites a further discussion elsewhere on how care sits with the touchstone of allowing wildness and uncontrol in education.

Further, the identified opportunities and barriers might resonate in other higher education contexts as well and overlap, in part, with Sterling's 10 lock-ins (Sterling, 2025). Circling back to Blenkinsop and Ford (2018) and their three strands, we conclude that while there is attention and sensitivity to the relational strand, and the beginning of attention for the existential strand, the critical strand seems rather absent. This might also be the result of the kinds of questions that were asked. Two important questions for the future development of outdoor relational education at WU emerge: how to disrupt resilient institutional and societal patterns that tend to keep these niches from expanding towards a new normal? And: How to strengthen the existential and critical strands and weave them together with the relational strand that seems to be taking hold?

### **Discussion on methodology**

In this paper we focus on protagonists and other stakeholders' view on outdoor relational education, to learn from their perspectives. We tried to acknowledge the grassroots character of the developments in unfolding and expansive niches in the terminology of transition theory (Laakso et al., 2021). We were keen to study where the energy surrounding this phenomenon was generated, and how that energy interacted with the institutional context. Within the subset of protagonists and other stakeholders, our sample of 31 interviewees generated—in our assessment—a high internal validity of the results. The external validity would require investigation beyond the WU, and perhaps beyond the Netherlands. As pointed out in the *Situational context* (Section 3.1), the WU is a highly specialised university that draws staff and students that already have, or tend to generate, a pro-environmental gaze. It may thus well be that the interest in outdoor relational education is relatively high at the WU compared to most other Dutch higher education institutes.

While the study focused on relational education, our methodology of interviewing was perhaps not fully aligned with such relational approaches. More relational methodologies such as participant observations, ethnological approaches or, on the methods side, outdoor data collection such as walking interviews, would have been interesting and probably enriching (Sand et al., 2022; Springgay & Truman, 2022), but generally speaking, relational approach also require substantially more time investment than conventional interviews.

Finally, many of our interviewees felt they were making first steps towards more outdoor relational education at WU. If a practical objective of education managers were to be to implement outdoor relational education top-down, it could be valuable to focus research specifically on educators avoiding or resisting such innovation.

### **Conclusion**

This investigation offers a rounded answer to the question of how outdoor relational education is perceived and engaged by WU protagonists and stakeholders, and what the perceived opportunities and barriers are for further implementation. While mainstream "outdoor education" is not per definition or by default considerate to "relational values," mainstream "relational education" may be less focussed on going outdoors to include nature as a key pedagogical component. The interviewees at WU indicate that the interweaving of "outdoor" and "relational" into "outdoor relational education" is something that helps to strengthen arguments and reasons to overcome some of the institutional barriers and to motivate strongly felt motivations to be a frontrunner within a large educational institute. Complementary to important

theorisations of innovating environmental and sustainability education, our results offer empirical support of the value of the interweaving of “outdoor” and “relational,” and sometimes wild pedagogies, in an institutional academic setting that is not necessarily conducive to such developments. Having this insight provides a starting point for the weighing of the pros and cons, and a subsequent ultimate verdict on the need for implementation of outdoor relational education. But such an approach would denote a typical *classical* decision-making approach (cf. Tarter & Hoy, 1998) that seems to sit somewhat uncomfortable with the grassroot character of what is unfolding at the WU at the moment.

Moreover, in our evaluation, the implementation of outdoor relational education in academia will not be merely a matter of tackling the barriers and pursuing the opportunities. The topic brings out fundamental questions about university education and science, and requires a different way of thinking and doing compared to traditional approaches. Many of the practitioners and stakeholders interviewed took a pragmatic stance to outdoor relational education; sometimes highly informed about theoretical developments in the field, but usually practice- and experience-based. For further advancements of wilding pedagogies, it is relevant to understand how practitioners in their day-to-day education understand and practice this and fuel theoretical discussions with real-life experiences. In line with relational learning, it is in the relationship between the theoretical and the practical from which deep transformations emerge that are underpinned with an ethic of care.

**Acknowledgments.** We warmly thank all interviewees for their willingness to participate in this research. We also extend a special thank you to the WUR 2002-2003 SUTQ-pilot coordinating team: Jet Bakels, Hannelie du Preez and Linda Luchtman, as well as Jan Steen, all of whom supported this research in the background, with much general enthusiasm for and dedication to the improvement of the quality of education.

**Financial support.** This research received no specific grant from any funding agency, commercial, or not-for-profit sectors.

**Ethical standards.** Wageningen University ethical guidelines for conducting this research were observed.

## References

- Berkes, F. (2017). *Sacred ecology*. Routledge.
- Blenkinsop, S., & Ford, D. (2018). The relational, the critical, and the existential: Three strands and accompanying challenges for extending the theory of environmental education. *Journal of Outdoor and Environmental Education*, 21(3), 319–330. DOI: [10.1007/s42322-018-0027-4](https://doi.org/10.1007/s42322-018-0027-4).
- Borg, C., Gericke, N., Höglund, H.O., & Bergman, E. (2012). The barriers encountered by teachers implementing education for sustainable development: Discipline bound differences and teaching traditions. *Research in Science and Technological Education*, 30(2), 185–207. DOI: [10.1080/02635143.2012.699891](https://doi.org/10.1080/02635143.2012.699891).
- Brownell, S.E., & Tanner, K.D. (2012). Barriers to faculty pedagogical change: Lack of training, time, incentives, and tensions with professional identity? *CBE Life Sciences Education*, 11(4), 339–346. DOI: [10.1187/cbe.12-09-0163](https://doi.org/10.1187/cbe.12-09-0163).
- Cutting, R., & Kelly, O. “We weren’t taught this way”: overcoming barriers when transitioning to new forms of pedagogy in educating initial science teachers for sustainability. In *Educating science teachers for sustainability. ASTE series in science education*. Springer (2015). 421–441. DOI: [10.1007/978-3-319-16411-3\\_22](https://doi.org/10.1007/978-3-319-16411-3_22).
- Dyment, J.E., & Potter, T.G. (2015). Is outdoor education a discipline? Provocations and possibilities. *Journal of Adventure Education and Outdoor Learning*, 15(3), 193–208. DOI: [10.1080/14729679.2014.949808](https://doi.org/10.1080/14729679.2014.949808).
- Gravett, K., Taylor, C.A., & Fairchild, N. (2024). Pedagogies of mattering: Re-conceptualising relational pedagogies in higher education. *Teaching in Higher Education*, 29(2), 388–403. DOI: [10.1080/13562517.2021.1989580](https://doi.org/10.1080/13562517.2021.1989580).
- Jickling, B., Blenkinsop, S., Morse, M., & Jensen, A. (2018a). Wild pedagogies: Six initial touchstones for early childhood environmental educators. *Australian Journal of Environmental Education*, 34(2), 159–171. DOI: [10.1017/ae.2018.19](https://doi.org/10.1017/ae.2018.19).
- Jickling, B., Blenkinsop, S., Timmerman, N., & De Danann Sitka-Sage, M. (2018b). Wild Pedagogies: Touchstones for negotiating education and the environment in the Anthropocene. In S.B. Jickling, S. Blenkinsop, N. Timmerman & M. De Danann Sitka-Sage (Eds).
- Laakso, S., Aro, R., Heiskanen, E., & Kaljonen, M. (2021). Reconfigurations in sustainability transitions: A systematic and critical review. *Sustainability: Science, Practice and Policy*, 17(1), 15–31.

- Leal Filho, W., Wu, Y.C.J., Brandli, L.L., Avila, L.V., Azeiteiro, U.M., Caeiro, S., & Madruga, L.R.da R.G. (2017). Identifying and overcoming obstacles to the implementation of sustainable development at universities. *Journal of Integrative Environmental Sciences*, 14(1), 93–108. DOI: [10.1080/1943815X.2017.1362007](https://doi.org/10.1080/1943815X.2017.1362007).
- Macintyre, T., Tilbury, D., & Wals, A. (2024). *Education and learning for sustainable futures: 50 years of learning for environment and change*. Routledge.
- Maffey, G., & Arts, K. (2022). Human rewilding. In *Routledge handbook of rewilding*. Routledge (pp. 374–382) DOI: [10.4324/9781003097822-39](https://doi.org/10.4324/9781003097822-39).
- Moore, J. (2005). Barriers and pathways to creating sustainability education programs: Policy, rhetoric and reality. *Environmental Education Research*, 11(5), 537–555. DOI: [10.1080/13504620500169692](https://doi.org/10.1080/13504620500169692).
- Morse, M., Jickling, B., Blenkinsop, S., & Morse, P. (2021). Wild pedagogies. In *International explorations in outdoor and environmental education* (vol. 9, p. 111–121). Springer Science and Business Media B.V. DOI: [10.1007/978-3-030-75980-3\\_10](https://doi.org/10.1007/978-3-030-75980-3_10).
- Moula, Z. (2021). Academic perceptions of barriers and facilitators of creative pedagogies in higher education: A cross-cultural study between the UK and China. *Thinking Skills and Creativity*, 41, 100923. DOI: [10.1016/j.tsc.2021.100923](https://doi.org/10.1016/j.tsc.2021.100923).
- Parry, S., & Metzger, E. (2023). Barriers to learning for sustainability: A teacher perspective. *Sustainable Earth Reviews*, 6(1), 1–11. DOI: [10.1186/s42055-022-00050-3](https://doi.org/10.1186/s42055-022-00050-3).
- Paulsen, M., Jagodzinski, J., & Hawke, S. (2022). Pedagogy in the Anthropocene: Re-wilding education for a new earth. In M. Paulsen, J. Jagodzinski, & S.M. Hawke, Eds.). Springer International Publishing. DOI: [10.1007/978-3-030-90980-2](https://doi.org/10.1007/978-3-030-90980-2).
- Porter, W.W., & Graham, C.R. (2016). Institutional drivers and barriers to faculty adoption of blended learning in higher education. *British Journal of Educational Technology*, 47(4), 748–762. DOI: [10.1111/bjet.12269](https://doi.org/10.1111/bjet.12269).
- Priest, S. (1986). Redefining outdoor education: A matter of many relationships. *The Journal of Environmental Education*, 17(3), 13–15. DOI: [10.1080/00958964.1986.9941413](https://doi.org/10.1080/00958964.1986.9941413).
- Quay, J., & Jensen, A. (2018). Wild pedagogies and wilding pedagogies: Teacher-student-nature centredness and the challenges for teaching. *Journal of Outdoor and Environmental Education*, 21(3), 293–305. DOI: [10.1007/s42322-018-0022-9](https://doi.org/10.1007/s42322-018-0022-9).
- Riley, K., Jukes, S., & Rautio, P. (2024). Relational ontologies and multispecies worlds: Transdisciplinary possibilities for environmental education. *Australian Journal of Environmental Education*, 40(2), 95–107.
- Sand, A.-L., Skovbjerg, H.M., & Tanggaard, L. (2022). Re-thinking research interview methods through the multisensory constitution of place. *Qualitative Research*, 22(4), 594–612.
- Springgay, S., & Truman, S.E. (2022). Critical walking methodologies and oblique agitations of place. In *Qualitative inquiry* (vol. 28, pp. 171–176). SAGE Publications Sage CA.
- Steinemann, A. (2003). Implementing sustainable development through problem-based learning: Pedagogy and practice. *Journal of Professional Issues in Engineering Education and Practice*, 129(4), 216–4216–4224. DOI: [10.1061/ASCE1052-39282003129](https://doi.org/10.1061/ASCE1052-39282003129).
- Sterling, S. (2025). Truly transformative? Why ESD falls short in epochal times. *Journal of Education for Sustainable Development*, Forthcoming.
- Tarter, C.J., & Hoy, W.K. (1998). Toward a contingency theory of decision making. *Journal of Educational Administration*, 36(3), 212–228.
- Whittaker, D. (2014). *The impact and legacy of educational sloyd: Head and hands in harness*, 1st edition. Routledge.
- WU website (2025). Facts and figures. <https://www.wur.nl/en/about-wur/facts-and-figures-1.htm?>

## Author Biographies

**Koen Arts** is a lecturer working on human dimensions of nature conservation, Koen specifically looks at human-environment interactions at a local and practical level. Topics of focus include: Local ecological skill; Community-based conservation; Human-wildlife interaction; Human rewilding; and Outdoor relational learning for transformative change. Koen usually adopts critical qualitative social science approaches, drawing from various (sub)disciplines such as material anthropology, political ecology, and outdoor studies. He enjoys working in multidisciplinary settings and increasingly applies principles of outdoor relational learning. His award-winning MSc course “Anthropology of outdoor skill” has been running since 2021. Koen also writes books on human-nature relationships for a broad audience.

**Paul Roncken** is a landscape architect, scientist, teacher and design critic. He graduated at the Wageningen University (BSc 1992, MSc 1996, PhD 2018). He is the managing director of the NatureCollege Foundation and held a part-time position as the independent advisor for spatial quality for the province of Utrecht (2016–2023). His research is focussed on the relationship between aesthetics, design and the perception of meaning in all types of landscapes (urban, rural, natural, digital, artistic). He is author of numerous articles and book chapters and invited speaker for academic, political and practice related events.

**Arjen Buijs** is a sociologist investigating human-nature interactions from an environmental justice perspective. Arjen has been investigating the plurality of people's values of nature and their relationship with stewardship practices from his PhD in 2009 onwards. More recently, he focuses on how citizens self-organise for stewardship or political actions, how they aim for sustainable transitions and how these groups relate to local and national governments. In several European and Global projects, Arjen investigates mosaic governance approaches as a way to foster collaborations between civil society and local governments. In addition, he argues for the need to develop new narratives on human-nature relationships through direct interactions with nature. These narratives may contribute to a "Positive Ecology" as a basis for individual stewardship practices as well as for increased legitimacy of nature conservation policies.

**Arjen Wals** is a Professor of Transformative Learning for Socio-Ecological Sustainability at Wageningen University. He also holds the UNESCO Chair of Social Learning and Sustainable Development. Wals is also a Visiting Professor at Norwegian Life Science University in Ås where he supports the development of Whole Schools Approaches & Sustainability. His recent work focusses 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.

---

**Cite this article:** Arts, K., Roncken, P., Buijs, A., & Wals, A. (2025). Embedding Outdoor Relational Education in Academia: Perceived Barriers and Opportunities at a Dutch University. *Australian Journal of Environmental Education* 41, 156–176. <https://doi.org/10.1017/ae.2025.24>