Bonding with the World: A Pedagogical Approach

Nadia Lausselet and Ismaël Zosso

1 Introduction

The relationship that humans maintain with their environment is an old question that has become pressing in recent years: it is presenting itself with force and translates into various expressions in public and political spaces. Never in teachers' memory had students gone on strike for the environment. The current pandemic, which disrupts the rhythms of our lives, also raises serious questions about the way we relate with the world. The question is so acute that many political bodies are obliged to push sustainability to the top of their priority lists and turn it into a key concept in their legislative agendas.

Various levels of the education system have committed to these emerging issues for quite a few years already, in the hope that schools will empower children and young people to relate to the world in a different way than in the recent past. This is a well-established process of handing over responsibility: The school is vested with an ambitious political function (see e.g. Künzli David & Bertschy, 2018). Transversal approaches such as peace and human rights education, health or global citizenship education and education for sustainable development (ESD) have thus arisen in the educational discourse. However, they scarcely make their way into official curricula and translate even less consistently into teaching practices (see e.g. Curnier, 2017). A consensual version of ESD is a noteworthy exception. In some respects, it is a success today, as it is embedded in curricula and is gradually becoming established in classroom teaching and learning practices as well as in institutional development plans. This is the result of a very long process based on sustainability as an emerging

N. Lausselet (✉) · I. Zosso
HEP Vaud, Av. de Cour 39, 1014 Lausanne, Switzerland
e-mail: nadia.lausselet@hepl.ch

I. Zosso
e-mail: ismael.zosso@hepl.ch

R. Jucker and J. von Au (eds.), *High-Quality Outdoor Learning*,
https://doi.org/10.1007/978-3-031-04108-2_15

autonomous scientific field, and supported by a progressively clear political will in the field of education.

At the same time, there is an increasing enthusiasm for teaching outside the classroom. Inspired by practices made in neighbouring countries, especially Nordic ones, and reinforced by the pandemic, experiments are recently flourishing in French-speaking Swiss schools. The press has seized on the subject by relaying the hope that outdoor education can strengthen pupils' relationship with 'nature' or improve children's physical and mental health in our digital societies. The link to ESD is sometimes made, expressing the will to relate with the world beyond textbooks. To live up to these expectations, it is essential not to limit outdoor education to a series of activities outside the classroom, a fad or a counterweight to current socio-environmental problems. Rather, it should be seen as a pedagogical approach that aims to build an environmental literacy and agency, leading to schools that act tangibly in and on their surroundings. This implies developing teaching rooted in places and lived experiences within these places, thus questioning targeted outcomes and the link to prescribed curricula on the one hand, and teachers' professional posture and practice on the other hand. However, the current flurry around outdoor education in French-speaking Switzerland mostly enjoys neither a conceptual framework nor an institutional structure to link current practices to a coherent outdoor curriculum. It is therefore difficult to turn the ongoing various experiments into real education processes—for both teachers and students—with an added value that goes beyond punctual experiences for a person or a classroom. Outdoor education practices are thus currently based mainly on the use of specifically dedicated places (e.g. *canapé forestier,* or forest couch) and on the will of individuals or specialised organisations, sometimes gathering in networks (e.g. outdoor teacher association *en dehors*, NGO-led "enseignerdehors.ch" network).

An outdoor competence centre has been created at a swiss teacher training university, the *Haute Ecole Pédagogique Vaud* (HEPVD), in order to promote a quality outdoor education in its training offer. The overall aim is to contribute to ongoing efforts, in Switzerland and abroad, to offer a more systematic and solid professional approach to outdoor education, and to frame it within the challenges of the Anthropocene. The approach worked on in this competence centre is based on a theoretical framework referring to place-based education and ESD on the one hand, and on empirical work done over years with both pupils and future teachers on the other. The latter has shown the necessity to articulate outdoor education along competences that are to be tackled progressively over the years, and are situated explicitly within the context of sustainability (see Lausselet & Zosso, 2022). Outdoor education is thus considered as a set of practices as well as creative and thinking tools that progressively enable an environmental literacy and that foster a proactive relationship with the world—or in other words, an agency—while taking the paradigm shift imposed by the current socio-environmental challenges seriously. Its integration within curricula, from early age to post-compulsory higher secondary, should develop and gain strength over the school years. Indeed, it is through regular practice in different settings that the effects of quality outdoor education are likely to unfold

and that learners will progress in mastering the competencies[1] necessary to build their environmental literacy and agency. In other words, the approach presented here hopes to contribute to the ongoing discourse by looking at a way to operationalise outdoor education within a learning progression aiming at and framed within sustainability. Establishing a theoretical framework that allows for this construction of a curricular progression is thus essential to move towards a concept both coherent with prescribed curricula and a citizenship relevant within the Anthropocene. In line with the idea of a learning progression for pupils, it is necessary to consider teacher education over time, with a progression in their outdoor teaching competencies.[2] Questions arise both at the epistemological level—the relevance of the taught academic (inter)disciplinary knowledge and possible ways to combine it with critical and community knowledge (Gutstein, 2007)—and at the level of modalities, places and actors of learning, all of which put present educational paradigms under new perspectives. Our approach is thus part of a wider reflection on the role of school in a society in transition, a school in which outdoor education takes a prominent place (Curnier, 2017; Higgins & Kirk, 2006; Lugg, 2007; Orr, 2004).

This chapter will present this pedagogical and didactic approach to outdoor education, both at a conceptual level and at the level of its operationalization. The first part will thus focus on the theoretical framework, while the second part presents a curricular learning progression for pupils and (student) teachers. We will address some related institutional issues before concluding.

2 Transformative Outdoor Education

The theoretical framework we work with is based on three pillars: active outdoor learning, place-based education, and citizenship education in a transformative ESD perspective. This approach has emerged from our specific educational and institutional context, and is summarised in Lausselet & Zosso (2022). It echoes a more general evolution within outdoor education studies looking at the nexus between transformative, outdoor and sustainability education as mentioned by Hill and Brown (2014).

2.1 Space, Places and Education

It is not surprising that geography provides the initial impetus to go out. Space is its central concept and it seems meaningful to explore it through outdoor work. Indeed,

[1] We understand competencies as defined by Weinert (2001): the ability and motivation to mobilise content-knowledge, skills and attitude in order to solve a problem.

[2] This also applies to other outdoor educators (from NGO, natural parks,…), but we will not delve further into this aspect.

the 'field' (in the sense of fieldwork) has been a key concept in geography since its early days, with investigation and data collection at its core (Morgan, 2013). This is reflected in school geography and related official documents, for which field work is as specific to the discipline as working with maps (IGU-CGE, 2016). Kinder (2013, 181) even believes that working outdoors in geography provides an opportunity to "rediscover the spirit of exploration that helped create the discipline". The approach we present in this article takes on this idea of exploring places not initially designed for teaching (Dickel, 2006),[3] with various possible purposes (e.g. to problematise, to discover, to observe, etc.) and various shapes.

We can further break down field work in terms of the autonomy afforded to students in their exploration of a place. Ohl and Neeb (2012), for example, have developed a categorisation ranging from a survey field trip—in which place-related knowledge is delivered to passive pupils—to a working field trip promoting autonomy in the pupils' exploration of the place. For example, geographic inquiry, built around a question identified either by the teacher or the pupils, is a type of working field trip. Pupils can also be allowed to explore the place freely, in a less pre-set form as proposed by Job et al. (1999), the teacher then making use of what arises. In our approach, we adhere to this perspective of a working field trip which favours an active encounter, as autonomous as possible, between place and pupil.

The third distinction is between rather cognitive and rather experiential approaches. The first one essentially focuses on observation or data collection, thus tending towards a scientific method. It contrasts with approaches mobilising senses and affect, more experiential in nature (Briand, 2015; Golubchikov, 2015; Preston, 2016). In the first case, the place remains an external object of study, in the other it becomes a subject, interacting with the pupil. Job et al. spoke as early as 1999 of "sensory fieldwork" enabling pupils to develop new sensitivities and perceptions of place, and thus a new way of relating with, and caring for it. Our approach lies in a dialogue between these cognitive and experiential dimensions, with care as its ultimate goal (see further down).

In brief, we set our approach in the context of exploratory outdoor work which favours an active encounter between pupil and place in a dialectic between sensory, affective and cognitive experience. This approach is rooted in the framework for outdoor education proposed by Simon Priest (1986, 13–14), which has the following characteristics: outdoor education builds on the heritage of experiential pedagogy; outdoor activities are vital for learning; learning is achieved through the mobilisation of cognitive, affective and motor skills; outdoor activities are part of an interdisciplinary curriculum (but can relate to disciplines and articulate them); and finally outdoor education develops relational skills.

Three issues we will look at more closely arise from our approach: the relation of sensory and place-based education with learning, the need for competent outdoor

[3] In German-speaking countries, learning outside the classroom, or *Ausserschulisches Lernen*, also includes didactic devices provided by third parties in indoor scientific or cultural venues (museums, laboratories, …), a dimension which we will not address.

teaching, and the relevance of a transformative sustainability education as framing for outdoor education in the Anthropocene.

2.2 Sensory and Place-Based Education

Preston points out that, in discourses about outdoor education, practices increasingly pretend to centre on learners and mobilise a sensory and affective dimension. She then demonstrates, through an analysis of a body of field trips carried out in Australia where outdoor work forms an inherent part of the curriculum, that they still remain strongly teacher-led with relatively little autonomy for pupils, and that they almost never focus consciously on the sensory and affective dimensions. Thus the "opportunities for a more critical, embodied, and socially engaged interaction with places are reduced" (Preston, 2016, 9). The author also points out that when these dimensions do appear, they concentrate on visual perceptions (e.g. through landscape sketch or photographs), with the other senses too little used for knowledge construction. She therefore shows that there is a gap between the discourse on practices or relative intentions, and the actual practices. Our analysis of practices and texts in scientific and professional literature seem to confirm this gap, which is widening as pupils progress through the education system.

We seek to reduce this gap by focusing on the idea of transforming a place into a place of learning, and by favouring, as mentioned above, a dialectic between cognitive and experiential dimensions. We explicitly seek the mobilisation of the senses and affect, while fostering a dialogue with the cognitive. We thus align with Golubchikov, who speaks of "feel trip" to designate an "explicitly-more-than-cognitive" approach "creating more stimulating learning conditions with lasting effects on the students' imaginaries and thinking" (2015, 144). For him, outdoor education has the unique potential to go beyond the "stylised knowledge of the classroom and explore the complexities, messiness and imperfections of the real world, while constructing important imaginary tools and skills for seeking social and spatial justice" (ibid.). In order to promote in-depth learning, we must therefore not ignore the cognitive dimension, but link it with an experiential and affective dimension, avoiding what Nairn describes as "disembodied fieldwork" (1996, 89) where pupils do not really come into contact with a place (e.g. when observing a landscape from a hill). The author also advocates integrating a critical perspective to contribute to an education based on the idea of social and spatial justice. In the broad field of outdoor education, this approach relates to what is defined as "place-based education" (e.g. Wattchow & Brown, 2011), implying that we benefit from the specific characteristics of a place when imagining a related outdoor activity. It is this kind of experiential place-based education that we work with in our teacher training activities.

2.3 Competent Outdoor Teaching: A Dialogue with Places

To take these elements into account, Golubchikov insists on the importance of a high level of professionalism including careful preparation both in terms of the choice of place and activity, and support for the pupils' reflective process. In Switzerland, Adamina (2010) also argues for the need to design activities that encourage autonomous exploration of places and make it possible to keep records of the work carried out outdoors. This allows to better entrench the outdoor activity in regular teaching, in line with the idea that "field trips only reach (…) their full educational potential if they contribute to a didactic sequence favouring reflection, problematisation and learning, in a dialectic between concrete and abstract, experimentation and conceptualisation" (Kent et al., 1997; Schroeder, 1998; Mérenne-Schoumaker, 2005, in Curnier, 2017, 184). In this context, the teacher plays both a central and peripheral role: central because, although place is at the heart of the approach, the role of the teacher remains essential in setting up the didactic device and moderating the process allowing these dialectics; peripheral because it means adopting a non-transmissive posture leaving room for a genuine encounter between pupil and place. In other words, transforming a place into a place of learning is not self-evident and must be learned and trained. For this we have found using what we term the 'trilogy of outdoor activity' to be useful for (student)-teachers:

- to actually use the place: the activity must not be feasible in the classroom, nor in other places except if they share similar features;
- to allow a lively encounter between pupil and place: the activity must allow a sensory, physical and emotional experience and offer a degree of autonomy to pupils;
- to contribute to learning outcomes: the link between the place-based experience and learning has to be reflected and made explicit, be it in relation to content-knowledge, skills or ways to connect to the world.

In order to take this trilogy seriously, we must go beyond expectations expressed by teachers who are interested in initial and in-service training courses and mostly wish to learn the logistics of organizing a field trip and managing a class outdoors on the one hand, and to have access to ready-made activities on the other. According to our observations, trainees do also need help to learn to mobilise this trilogy of outdoor activity, to link it with the prescribed curriculum and classroom work, and to go beyond isolated field trips in order to consider their outdoor work over time (Lausselet & Zosso, 2018). This approach thus seeks "through exploratory and prospective work" to push "the limits of what exists", to leave "established routines, traditions and customs" (Lange, 2017, 355), and contribute to the evolution of today's school. It is in order to address this need for competent outdoor teachers and quality outdoor education that the outdoor learning progression presented at the end has been conceptualised.

2.4 Environmental Resonance and Agency

While remaining within this general framework, our approach has progressively integrated a political dimension in the broad sense (Lugg, 1999), and thinking tools important to the humanities and social sciences such as notions of interdependencies, scales (spatial or temporal), actors, or emergence. In line with the societal issues mentioned in the introduction, we have gradually connected our approach to a transformative sustainability education. For many years Lugg (2007) has linked ESD with outdoor education, stimulated by the integration of ESD in Scottish schools through strong support at policy level. Indeed, outdoor education is mentioned as a possible approach to promote environmental awareness, active citizenship and interdisciplinarity. Higgins and Kirk (2006, in Lugg, 2007) sought on this basis to promote trans- and interdisciplinary approaches by emphasising the need to train teachers in these approaches. They echoed Orr (2004) for whom interdisciplinary outdoor learning is fundamental, as there is a direct correlation between disciplinary learning in the classroom and the overuse of nature. Orr believes that disciplinary learning in a classroom prevents a systemic vision on the one hand, and cuts us off from the affective dimension that links us to nature on the other, leading to a double disconnect. Even before Higgins & Kirk, Brookes (1998, in Lugg, 2007, 107) distinguished between a "reconciling" approach, in which teaching adapts to the potentialities of the place, and a "colonising" approach, in which teaching imposes on the place, perpetuating the existing power relation between humans and their environment. Our approach fits into this discussion with a key concept developed by Rosa (2018): resonance. Rosa defines it as follows:

> Resonance is a cognitive, affective and physical relationship to the world in which the subject, on the one hand, is touched […] by a fragment of the world, and where, on the other hand, he or she 'responds' to the world by acting concretely on it, thus experiencing her or his own efficacy. (2018, 187).

Furthermore, with Wallenhorst and Pierron (2019) we contrast this strongly individual concept with the idea of resistance, more politicised and collective. Indeed, some places and contexts are so degraded or under so much pressure that they call for resistance, which implies a political dimension, rather than resonance. The actions undertaken by Galician classes during the Prestige oil spill are a good illustration of this idea of collective resistance (Jimenez-Aleixandre, 2003, 2006). Eventually, in order to avoid the previously mentioned 'colonising' approach and to strengthen an ethical base, we have taken up the idea of 'care', as already mentioned. Initially coming from the field of bio-ethics, authors such as Chwala (2017) have associated it with learning processes in the field of environmental education. We thus consider 'care' as a central element to build a positive resonant relationship with the world, and to enter into a constructive resistance leading to action.

In ESD discourse, and less specifically relating to outdoor pedagogy, Lotz-Sisitka et al. (2015) echoes this by insisting on the importance of implementing a transformative pedagogy to face current challenges, i.e. a pedagogy that teaches to transform society, and does so while teaching it. They argue for a tertiary education that

questions educational norms and speaks of "transformative and transgressive social learning". Curnier (2017) indirectly relates to this by conducting an in-depth reflection on the role of school in a society in transition, and stresses the importance of transforming our relationship:

- to the world, by giving humanity a more humble position and questioning our anthropocentric perspective;
- to the human being, by placing her or him in a wider context and by (re)learning to articulate her or his individual well-being with the common good on the one hand, and the respect of the intrinsic value of the biosphere and its limits on the other;
- to knowledge(s), by perceiving learning as "a system composed of activities mobilising cognition, emotions and experience" (Curnier, 2017, 194), with learning taking place not only in interaction with others but also in interaction with the environment and therefore place.

In this context, the author assigns a particular importance to outdoor education, quoting Freire: "no one educates others, no one educates himself alone, humans educate each other, through the world" (1970/2001, 62, quoted in Curnier, 2017, 226). Curnier mentions in particular the multiplicity of knowledges (including content-knowledge, skills and attitudes) that can be worked on, the opportunity of tackling the link between knowledge, action and impact in a concrete way, or that of re-establishing a connection with our environment, and particularly the natural one.

Barthes et al. also articulate outdoor work and ESD around territorial foresight as a "tool (…) to analyse spaces and related social phenomena" (2019, 1). As previously mentioned authors, they claim the need for new relationships to knowledge, the world and alterity. They explicitly add the need for a critical perspective on power issues and related institutions and their impact on space, thus integrating the political and social dimension specific to place-based education. According to them, "territorial foresight includes issues of collective participation in the evolution of a place" (ibid.), based on local, even micro-local dynamics. They formalise the idea of citizens' knowledge production as well as the necessity of reconnecting with collective imaginations in a transformative perspective.

We believe that outdoor pedagogy understood in this way, through its entrenchment in experience, its intrinsically interdisciplinary dimension, its conception of knowledge and of the world as a construct, and its progressively political and transformative dimension, can respond to the societal issues mentioned in the introduction. Upon this theoretical basis we have developed a proposal for an outdoor curricular learning progression for pupils which should then enable us to structure a coherent training offer for teachers.

3 A Learning Progression for Outdoor Education: A Curricular Proposal

When journalists ask outdoor teachers why they practice outdoor education, the most common answer is to create or recreate a link to the environment (or to nature). This formulation is very convenient and, perhaps for that reason, frequently used. It nevertheless raises several questions if we want this link to become effective and not to remain at the level of wishful thinking. The first question is of a pedagogical and didactic nature. What type of link can reasonably be worked on at each educational stage in order to foster a strong bonding with the world? And, consequently, what competencies are needed by teachers to achieve this objective? In other words, is it possible to implement this concept of bonding and make it part of a curricular progression? This idea of progression is particularly critical to us because, in the perspective of integrating outdoor education into regular teaching practices, it is important that pupils progress in mastering competencies specific to working and learning outdoors, with and within the world. Furthermore, since we are working within a paradigm of a transformative pedagogy, we must acknowledge that this paradigm cannot be achieved by an accumulation of isolated activities raising environmental awareness but must be part of a long-term educational project with an emancipatory aim.

3.1 Bonding with the World: A Curricular Progression

French-speaking Switzerland is part of the HarmoS concordat, a national contract between the Confederation and the federal states or *cantons*. This does not allow the legal and regulatory framework to be modified to make outdoor education compulsory within the prescribed curricula. We are therefore far from certain Anglo-Saxon or Nordic situations, where there are official incentives for outdoor education. Thus, the aim of a curricular perspective as presented hereafter can only be to help integrate outdoor education within the prescribed curricula in a coherent manner, avoiding an additional layer of prescription or a normative will in a field of school practices which still remain relatively unregulated. It is to support this coherent integration that teacher training institutions such as the HEPVD need to formalise a framework to develop meaningful practices and set milestones for a progression: the aim is to progressively train competencies necessary to build an environmental literacy and agency while contributing to quality outdoor education. The challenge is to give outdoor education a recognised status that goes beyond the categorisation of this practice as a 'personal choice' for some convinced teachers. This status should also allow for the perpetuation of collective projects that are institutionally entrenched and have an impact in and on the world. In other words, it has to be acknowledged that outdoor education is not a practice that depends solely on an individual environmental sensitivity—a personal attitude—but rather is an established and necessary

pedagogy—a crucial part of our education system—in which educators can be trained and in which they must progress to achieve professional expertise. More broadly, with a curricular and transformative approach we can move beyond perspectives considering outdoor education superficially, or in a manner that is not thought for a school context, as mentioned at the beginning. We have therefore attempted to build an outdoor education learning progression in order to provide a framework than opens up perspectives for progress, for pupils as well as teachers, in their environmental literacy and agency, and related didactics for the latter. This learning progression can also be viewed as a tool to place outdoor education within practices contributing to a transformative pedagogy. We will now look at this double curricular learning progression, one for pupils and the other for (future) teachers.

3.2 A Progression for Pupils

As the aim is to work on the pupils' bond to the world through outdoor education, we must define this bond and structure it in a progression tending towards a resonant and socially relevant link. Based on the clusters of disciplinary and cross-curricular objectives of the prescribed curricula, in our case the French-speaking *Plan d'Etude Romand* (PER) in Switzerland, we propose a priority learning objective for each level (in French *cycle*) of compulsory education, as well as for post-compulsory education (higher-secondary), bearing in mind that the boundaries between these levels must remain porous (Table 1):

Table 1 Training pupils and young people through outdoor education

Early childhood (4–8 year-olds)	Primary (8–12 year-olds)	Secondary (12–15 year-olds)	Higher secondary (over 15 years old)
Sense of belonging	Exploration (guided)	Exploration (autonomous)	Reflexivity
Feeling safe within the environment	Adaptation (place <-> self)	Adaptation (place <-> self) and commitment	Commitment
Sense of well-being in the environment	Sense of well-being in the environment	Thinking the environment and myself in it	Communication to and with others about environment
Awakening to the complexity and richness of the environment	Caring for the environment	Caring for the environment	Networking with societal actors for the environment
Curiosity (about the living world)	Curiosity (about biodiversity) and understanding	Prospective curiosity (about possible transformations of the environment)	Action and agency
Inclusive bond	**Adaptive bond**	**Transformative bond**	**Performative bond**

- The objective for early childhood education (cycle 1: 4 to 8 year-olds) would be to build an inclusive bond with the environment: pupils learn to include the environment in the construction of their reality, their identity and their relationships and therefore also to include themselves in it by grasping the idea of interdependence. From the outset, we consider the environment not as a resource to be taken advantage of, but as a constitutive element of personal and collective identities as well as a referent of social practices.
- The objective for primary education (cycle 2: 8 to 12 year-olds) would be to work on an adaptive bond. This means giving pupils the opportunity, through activities and projects, to experience places in different ways. The aim is to acquire the capacity to understand the environment in order to be able to adapt to it, and adapt it in an adequate manner for one's needs (e.g. by building a small shelter with branches and leaves). In other words, pupils, individually and collectively, should be able to create a dialogic relationship with places, to get to know them and feel them better, and thus adapt to them and regulate their impact in a caring way.
- Once they have gone through these two stages, inclusion and adaptation, we think that secondary pupils (cycle 3: 12 to 15 year-olds) will be able to think how to transform places in the sense of prospective thinking, which would be a prospective bond. This implies transforming one's perception of a place, seeing its potential, and imagine what transformations would be needed in order to allow this potential to flourish. Activities and projects that consistently include reflecting (the pupils are outside and think outside) and conceptualising (the pupils do land art not just for the aesthetic but to work on an idea of nature, planetary limits, etc., and are aware of this) dimensions. Based on this, it becomes possible to start thinking about the potentials of a place, and possible ways towards it, in a prospective perspective.
- Finally, higher secondary pupils will work on a performative bond that makes them act. At this stage, the pupils are able to go beyond the class and rely on the bond they have built in order to mobilise their environmental literacy and use it for an environmental agency within society.

3.3 A Progression for (Future) Teachers

In order to implement the curricular learning progression presented here, we need to train educational actors in this direction. In the same way, we need to think about training in outdoor education in a progressive manner, be it to distinguish between approaches at primary and secondary level, or between beginners and experienced professionals. Many quality training courses exist on the Swiss market, but as a higher education institution, our task was to define a coherent theoretical framework allowing for consistency, and, based on this, define and implement relevant learning progression for teachers. Three levels of expertise, co-existing in this vast field of outdoor education, have been defined:

- Implementing outdoor activities: at this first level, the emphasis is on doing. It means carrying out and facilitating established activities outside the classroom to transmit or work on subject-knowledge and possibly raise awareness. The visit to the sewage treatment plant or a forester's activity on the importance of forest insects fall into this category. Popular, high-quality books provide numerous suggestions for such activities outside the classroom.
- Teaching outside: at this second level, the emphasis is on instruction. Curricular contents are transposed into a different spatial context to make them more real. We go to the forest to see the trees in real life and study them, we study the industrial revolution by doing an inquiry in a wasteland or in urban remains of industrialisation. Subject-specific didactics apply to this type of thematic outdoor work, with no specific, transversal outdoor education methodology.
- Outdoor education: at this third level, the emphasis is on education. In other words, this approach integrates questions of values and systems, works on the bond between pupil and place, and thus contributes to the construction of an environmental literacy and agency. It therefore requires using a pedagogy of bonding with the world practised over time. It also implies questioning our view and our educational practices in, on, with and for our environment. The goal is to build a reflective and critical professional attitude, informed by research and practice, contributing to a quality education that reflects contemporary issues.

As seen, we do not mean to limit ourselves to giving examples of good outdoor education practices or to list themes for integrating the outdoors into the prescribed curriculum. We need to make intellectual, didactic and curricular tools available. These allow teachers and trainers to consider bonding with the world from a truly holistic, reflective and critical perspective. We locate the HEPVD's training architecture at this level, useful for both training and research. More concretely, this translates into the division of training in two blocks, one part in initial teacher training which moves rapidly from implementing to teaching, thus from facilitation to the design of disciplinary and interdisciplinary or a-disciplinary (if the focus is, for example, on cross-curricular skills) activities, to their integration into broader sequences. The initial training also aims to delve into environmental literacy by addressing some of the possibilities to start working on it with pupils. We leave mastering the systematic integration of outdoor sequences in pupils' curricula to in-service teacher training as it requires a broader vision of school calendars and tasks. In-service training also aims to better understand and deepen the possibilities of working on environmental literacy with pupils, before addressing environmental agency. In both blocks, we stress didactic tools allowing the transposition between place and knowledge, a transposition specific to outdoor education (OE for short in Table 2).

Table 2 Training teachers to outdoor education

Discover OE principles and practices	Create OE activities/sequences	Carry out OE activities/sequences	Plan OE activities/sequences and integrate them into the curriculum	Question OE
Discover pluralistic OE types and approaches	Create disciplinary, inter-disciplinary and a-disciplinary activities rooted in place	Implement activities and regulate learning situations outside the classroom	Master the link between outdoor activities and learning outcomes over the school years	Differentiate activities for pupils with specific needs
Discover concepts of environmental literacy	Integrate concepts of environmental literacy	Act safely on, with and for the environment; discover concepts of environmental agency	Integrate concepts of environmental agency	Reflect the impact of OE on the environment
Understand themes of environmental literacy	Mobilise themes of environmental literacy	Communicate and link with school and environmental actors	Handle disciplinary, cross-curricular and life skills	Look at research practices Get into networking
Initial teacher training			**In-service teacher training**	

4 A Need for Institutional Change: A Competence Centre for Outdoor Education

To pilot these two learning progressions, but also to develop research and training in outdoor education more widely, the HEPVD has created a specific competence centre in 2020. This project has proved necessary to meet the ever-increasing demand for training, but also to develop course content, meeting the theoretical and curricular goals presented here. Moreover, the existing institutional structures, divided into disciplines and transversal approaches, did not allow for the trans- and inter-disciplinary perspective at the core of outdoor education. Nor did they allow for the overall vision and the flexibility necessary to coordinate between—and work with—the wide range of other actors implicated in formal outdoor education. This autonomous centre, albeit affiliated to the institution, can be more responsive, operates in a decentralised manner with this large number of actors, and offers freedom of thought and action to examine and improve what exists, both in terms of training and research. This competence centre is based on three pillars: training (both initial and in-service), research and community service (e.g., collaborating with nature parks). It also contributes to coordinating efforts and political lobbying within and for the field. Materialising outdoor education through this new structure and linking it to ongoing sustainability education processes helps supporting the high expectations

of outdoor education mindful of current socio-environmental issues and striving towards higher-quality education.

Our goal is that outdoor education becomes a relatively autonomous pedagogical field in French-speaking Switzerland. For that, we must meet three main conditions. First, we need to define boundaries for our field, both practically and conceptually, so as to interact with other fields and be recognised by them. Second, we must produce a discourse from our field and not only about our field. Therefore, we not only need to develop tools to analyse and criticise our practices and theories, but we also need to think about the school from the perspective of our practices and our theoretical framework. Thus, we need to develop discourses rooted in outdoor education on sustainable development and ESD, on digital learning, on inclusive (or exclusive) education, on gender issues or on assessment. Finally, we aim to create a teaching and training community that goes beyond our state institution to operate on a regional scale. In this way, differences in perspective between institutions can be mutually enriching and strengthen the legitimacy of outdoor education. No single project and no single disciplinary-focused structure can meet these conditions. The establishment of a specific outdoor competence centre aims at making a decisive contribution to this project of epistemic, didactic, pedagogical and institutional empowerment.

5 Conclusion: Achieving Hope, Daring Utopia

The recent and brutal emergence in the public arena of civilisational, even eschatological, anxieties induces, whether we like it or not, an extensive redrafting of our relationship to our environment, to society, to nature, to the wild, to our habitat, and to politics as well. Not that these reflections were previously absent, as scientists had brought up the topic long ago, but there was no socially imposed urgency. We must take up part of the challenge which the socio-environmental situation imposes on the whole of human society: that of education. Although it cannot and should not be the role solely of education to change the world, we believe that schools must be consistent with current issues, and can contribute to establishing an environmental literacy and agency that allows us both to maintain hope in the face of crises and to bring about new perspectives among young people. They will thus be able to think, invent and experiment new forms of resonances with the environment. Outdoor education is one of the tools that should enable this environmental literacy and agency. But given its complexity, its innovative character within the Swiss education system, and the high expectations placed on it, we must emphasise quality of teaching and therefore of training. Only in this way can outdoor education contribute to quality education. The present uncertainty keeps us on the move and encourages us to collectively map out alternative paths in order to explore our present and re-imagine this world of finite resources with infinite possibilities. Outdoor education as presented here aims to contribute to this.

Recommended Further Reading

1. Lugg, A. (2007). Developing sustainability-literate citizens through outdoor learning: possibilities for outdoor education in Higher Education. *Journal of Adventure Education & Outdoor Learning*, *7*(2): 97–112.
2. Rosa, H. (2018). *Resonance: A Sociology of Our Relationship to the World*. London: Polity Press.
3. Golubchikov, O. (2015). Negotiating critical geographies through a "feel-trip": Experiential, affective and critical learning in engaged fieldwork. *Journal of Geography in Higher Education*, n°39, 143–157.

References

Adamina, M. (2010). *Ausserschulische Lernorte (ASLO).* . Retrieved April 24, 2019, from http://docplayer.org/38514377-Ausserschulische-lernorte-aslo-1.html.

Barthes, A., Blanc-Maximin, S., & Dorier-Appril, E. (2019). Quelles balises curriculaires en éducation à la prospective territoriale durable ? Valeurs d'émancipation et finalités d'implications politiques des jeunes dans les études de cas en géographie. *Éducation et socialisation*, *51*. Retrieved April 25, 2019, from https://journals.openedition.org/edso/5755.

Briand, M. (2015). La géographie scolaire au prisme des sorties : Pour une approche sensible à l'école élémentaire. *ESO Travaux & Documents CNRS, 38*, 75–83.

Brookes, A. (1998). Place and experience in Australian outdoor education and nature tourism. In Outdoor recreation – Practice and ideology from an international comparative perspective, Umea, Sweden.

Chwala, L. (2017). Le soin de la nature chez les enfants et les adolescents : expériences marquantes pour le développement du sens de la connexion. In C.Fleury & A-C. Prévot (Eds.), *Le souci de la nature : apprendre, inventer, gouverner* (pp.191–206). Paris: CNRS.

Curnier, D. (2017). *Quel rôle pour l'école dans la transition écologique ? Esquisse d'une sociologie politique, environnementale et prospective du curriculum prescrit*. Lausanne: Université de Lausanne.

Dickel, M. (2006). Zur Philosophie von Exkursionen. In: W. Hennings, D. Kanwischer, & T. Rhode - Jüchtern (Eds.), *Exkursionsdidaktik innovativ? Geographiedidaktische Forschungen* (Bd. 35, pp. 31–49). Weingarten, Selbstverlag.

Freire, P. (1970/2001). Pédagogie des opprimés. Paris: La Découverte.

Golubchikov, O. (2015). Negotiating critical geographies through a "feel-trip": Experiential, affective and critical learning in engaged fieldwork. *Journal of Geography in Higher Education, No, 39*, 143–157.

Gutstein, E. (2007). Connecting community, critical and classical knowledge in teaching mathematics for social justice. In: The Montana Mathematics Enthusiast, Monograph 1 (pp.109–118). Retrieved February 04, 2021, from http://radicalmath.org/docs/Gutstein.pdf.

Higgins, P., & Kirk, G. (2006). Sustainability education in Scotland: The impact of national and international initiatives on teacher education and outdoor education. *Journal of Geography in Higher Education, 30*(2), 313–326.

Hill, A., & Brown, M. (2014). Intersections between place, sustainability and transformative outdoor experiences. *Journal of Adventure Education & Outdoor Learning, 14*(3), 217–232.

IGU-CGE. (2016). International Charter on Geographical Education. [En ligne]. http://www.igu-cge.org/Charters-pdf/2016/IGU_2016_def.pdf (consulté le 12.03.2019).

Jimenez-Aleixandre, M-P. (2003). Educación en un contexto social: la marea negra en los centros escolares gallegos. Aula. 122/2003.

Jimenez-Aleixandre, M-P. (2006). Les personnes peuvent-elles agir sur la réalité ? La théorie critique et la marée noire du prestige. In A. Legardez, L. Simmoneaux (Eds.), L'école à L'épreuve de l'actualité. Issy-les-Moulineaux: ESF.

Job, D., Day, C., & Smyth, T. (1999). Beyond the bikesheds: Fresh approaches to fieldwork in the school locality. Sheffield: Geographical Association.

Kent, M., Gilbertson, D., & Hunt, C. (1997). Fieldwork in geography teaching. A critical review of the literature and approaches. *Journal of Geography in Higher Education*, *21*(3), 313–332.

Kinder, A. (2013). What is the contribution of fieldwork to school geography? In D. Lambert & M. Jones (Eds.), *Debates in geography education* (pp. 180–192). Abingdon: Routledge.

Künzli David, C., & Bertschy, F. (2018). Bildung als Reparaturwerstatt der Gesellschaft? – Die zu unterscheidenden Facetten von Bildung im Kontext einer Nachhaltigen Entwicklung. In S. Meisch, U.Jäger, & T. Nielebock (Hrsg.). Erziehung zur Friedensliebe: Annäherungen an ein Ziel aus der Landesverfassung Baden-Württemberg (pp. 289–304). Baden-Baden: Nomos.

Lange, J-M. (2017). Curriculum. In : A. Barthes, J-M. Lange, & N. Tutiaux-Guillon (Eds.), Dictionnaire critique des enjeux et concepts des "éducations à" (pp.351–359) Paris: L'Harmattan.

Lausselet, N., & Zosso, I. (2018). Projektarbeit an ausserschulischen Lernorten - ein Beitrag zur Bildung für Nachhaltige Entwicklung? In: P. Gautschi, A. Rempfler, B. Sommer, & M. Wilhelm (Eds.), *Aneignungspraktiken an ausserschulischen Lernorten: Tagungsband zur 5. Tagung Ausserschulische Lernorte der PH Luzern vom 9. und 10. Juni 2017*, Zürich, LIT Verlag (pp. 173–181).

Lausselet, N., & Zosso, I. (2022). Outdoor and sustainability education: How to link and implement them in teacher education? An empirical perspective. In P. Vare, N. Lausselet, & M. Rieckmann, (Eds). *Competences in education for sustainable development: Critical perspectives.* New York: Springer (pp.167–174).

Lotz-Sisitka, H., Wals, A., Kronlid, D., & McGarry, D. (2015). Transformative, transgressive social learning : Rethinking higher education pedagogy in times of systemic global dysfunction. *Current Opinion in Environmental Sustainability, 16*, 73–80.

Loynes, C. (2002). The generative paradigm. *Journal of Adventure Education & Outdoor Learning, 2*(2), 113–125.

Lugg, A. (1999). Directions in outdoor education curriculum. *Australian Journal of Outdoor Education, 4*(1), 25–32.

Lugg, A. (2007). Developing sustainability-literate citizens through outdoor learning: Possibilities for outdoor education in Higher Education. *Journal of Adventure Education & Outdoor Learning, 7*(2), 97–112.

Merenne-Schoumaker, B. (2005). *Didactique de la géographie. Organiser les apprentissages.* Bruxelles: De Boeck.

Morgan, J. (2013). What do we mean by thinking geographically? In D. Lambert & M. Jones (Eds.), *Debates in geography education* (pp. 273–281). Abingdon: Routledge.

Nairn, K. (1996). Parties on geography field trips: embodied fieldwork? *New Zealand Women's Studies Journal*, *12*(Special Issue: Educating Sexuality), 86–97.

Ohl, U., & Neeb, K. (2012). Exkursionsdidaktik. Methodenvielfalt im Spektrum von Kognitivismus und Konstruktivismus. In: J.-B. Haversath (Ed.) Geographiedidaktik. Theorie - Themen – Forschung, Braunschweig, Das Geographische Seminar (pp. 259–288).

Orr, D. W. (2004) *Earth in mind: On education, environment, and the human prospect* (rev. ed., 221p.). Washington: Island Press.

Preston, L. (2016). Field 'Work' vs 'Feel' trip: Approaches to Out-of-Class experiences in geography education. *Geographical Education, 29*, 9–22.

Priest, S. (1986). Redefining outdoor education: A matter of many relationship. *Journal of Environmental Education, 17*(3), 13–15.

Rosa, H. (2018). *Résonance: une sociologie de la relation au monde.* Paris: Editions La Découverte.

Schroeder, J. (1998). La leçon de géographie: une relecture d'auteurs anciens. In J.-L. Klein & S. Laurin (Eds.), *L'éducation géographique formation du citoyen et conscience territoriale* (pp. 159–182). Sainte-Foy: Presses de l'Université du Québec.

Wattchow, B., & Brown, M. (2011). A pedagogy of place : Outdoor education for a changing World (244p.). Clayton: Monsah University publishing.
Wallenhorst, N., & Pierron, J.-P. (2019). *Éduquer en anthropocène.* Lormont: Le bord de l'eau.
Weinert, F. E. (2001). A concept of competence: A conceptual clarification. In: D. S. Rychen, & L. H. Salganik (Eds), *Defining and selecting key competencies* (pp. 45–65). Seattle: Hogrefe & Huber.

Nadia Lausselet has been working for more than 15 years in the field of sustainability education, as a teacher, member of an NGO and teacher trainer. Her research interests focus on teacher competencies for sustainability education, outdoor education and intercultural perspectives on sustainability education. She has contributed to launch and now leads the implemen-tation of sustainability education in her teacher training institution.

Ismaël Zosso has been working for more than 20 years in the field of outdoor education, as a teacher and a teacher trainer. His research interests focus on outdoor and place-based education. He has implemented and is now leading the outdoor competence centre mentioned in this article, and is turning his dream of a place for outdoor education in the Alps into a reality.