



Education 3-13

International Journal of Primary, Elementary and Early Years Education

ISSN: (Print) (Online) Journal homepage: <https://www.tandfonline.com/loi/rett20>

'Ikke skade treet': 'Don't harm the tree'. Narratives from a Norwegian kindergarten

Angela Garden & Nicola Hirst

To cite this article: Angela Garden & Nicola Hirst (2022): 'Ikke skade treet': 'Don't harm the tree'. Narratives from a Norwegian kindergarten, Education 3-13, DOI: [10.1080/03004279.2022.2151318](https://doi.org/10.1080/03004279.2022.2151318)

To link to this article: <https://doi.org/10.1080/03004279.2022.2151318>



© 2022 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group



Published online: 03 Dec 2022.



Submit your article to this journal [↗](#)



Article views: 89



View related articles [↗](#)



View Crossmark data [↗](#)

'Ikke skade treet': 'Don't harm the tree'. Narratives from a Norwegian kindergarten

Angela Garden  and Nicola Hirst

School of Education, Liverpool John Moores University, Liverpool, UK

ABSTRACT

Outdoor pedagogies have gained significant traction in Early Childhood Education over the years and European traditions represent a cultural norm in what is generally referred to as Scandinavian outdoor pedagogies. This small-scale ethnographic research adopted an interpretative methodological approach and afforded opportunities to observe young preschool children engaging in an outdoor, allotment, Garden School in the centre of Oslo Norway. Here we were in the privileged position to capture moments vis a vis the environment, and whilst we acknowledge traditional child led discourses, affiliated with healthy child development, we also envisaged a world where children engaged in post-anthropocentric entanglements with human and non-human kinships.

ARTICLE HISTORY

Received 17 September 2022
Accepted 31 October 2022

KEYWORDS

Kindergarten; outdoor learning; sustainability; intergenerational; risk; space

Introduction

This research emerged from a multi-faceted Erasmus visit to Norway during Spring 2022. As academics from a UK university located in the Northwest of England, we were cognisant of our status as guests in Norway, and we considered shared conversations and observations as part of an assemblage (Deleuze and Guattari 1987) and a meta perspective 'as outsiders looking inwards' (Tillmanns 2017, 35). Fellow academics in Norway furnished opportunities for reflective, empirical research during the visit, and our research practices are ethically reflective and reflexive, with our musings helping us to think about taken for granted assumptions and blind spots. Therefore, the centre of gravity was shifted as we engaged in what Alvesson and Skoldberg (2018) call, 'interpretation of interpretation' (11).

This research paper is based on our semi-ethnographic and rhizomorphous fieldwork with one Norwegian kindergarten as they utilised a local city community allotment termed locally as 'Garden School'. The allotment is used by multiple schools, kindergartens, members of the local community, university students and allotment volunteers, with varying initiatives to support people who have arrived in Norway as their new home. This study employs a mapping of the physical environment of the Garden School and borrows the idea of nomadism (Deleuze and Guattari 1987), as it exemplifies 'free spaces for thinking' (Tillmanns 2017, 37). The characteristics of spaces for risky play and culturally associated practices are discussed, and we were drawn to previous analyses of pedagogically staged places, analyses of spaces created by children 'in-between', and hidden spaces where children seek privacy (Nordtømme 2012). In this paper, we consider our observations of the children, alongside conversations with the kindergarten teachers to discuss the narratives and themes that emerge.

CONTACT Angela Garden  a.s.garden@ljmu.ac.uk

This article has been republished with minor changes. These changes do not impact the academic content of the article.

© 2022 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group

This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

Literature review

The Norwegian context

Changing demographics in Norway (Gleditsch 2020), in conjunction with more movement often due to work, has meant that increasingly, young children grow up away from grandparents. In addition, Oropilla, Ødegaard, and Quinones (2022) report that Norway ensures that the youngest children and older adults are cared for through public health and social services, such as kindergartens and elderly homes, and that this is where the youngest children and oldest adults spend most of their day. Statistics Norway (2021a) indicate that 92.8% of children aged one to five years attended kindergarten in 2020 whereas 28.9% of the population over 80 years old reside in care homes (Statistics Norway 2021b). These societal trends give weight to the importance of intergenerational inclusion in kindergarten activities and Oropilla, Ødegaard, and Quinones (2022) argue that more research is needed in early childhood education related to *how* kindergarten practitioners can include older people in their everyday practice. We offer a specifically Deleuzian response as we embrace the unfolding concept of knowing other (Young 1995) and celebrate quality intergenerational [lifelong] learning, where the 'transfer and exchange of knowledge ... fosters reciprocal learning relationships ... recognising that for both generations to benefit, both groups need to give and receive' (Kernan and Cortellesi 2020, 4).

Kindergarten places are provided not just for care services while parents work, but also with the recognition of its importance to children's development as human beings and as arenas for cultural formation, also referred to as *Bildung* or *danning* in Norwegian (Ødegaard and Krüger 2012). The extensive expansion of kindergartens in Norway over the last 15 years has meant that place, space, and materiality have been increasingly acknowledged in recent years (Nordtømme 2012). Socio-cultural theory is at the core of Norwegian policy and a socio-cultural view places social interaction at the core of development, with children viewed as active meaning-makers. From this perspective learning is achieved through social interactions and in the everyday routines of the kindergarten, thus, we avoid using the term 'visiting' the community allotment (Garden School) to avoid situating the children as tourists in their own learning (Hirst 2021).

The Norwegian kindergarten

In Norway, the kindergarten is an early years setting catering for the educational and care needs of children from birth to 6 years of age. One teacher and two trained assistants work as a team with 10–20 children depending on age, with outdoor pedagogies occurring routinely for children in Norway. The Norwegian Framework Plan for Kindergartens (Norwegian Ministry of Education & Research 2017) applies to all kindergarten settings and this phase of a child's education and care is seen as separate from mainstream schooling, which starts in the year a child turns 6. It is asserted that core values of kindergartens should be 'promulgated, practised and manifest in every aspect of a kindergartens pedagogical practice' (Norwegian Ministry of Education & Research 2017, 1) and section one of the Kindergarten Act states that kindergartens should build on 'fundamental values in the Christian and humanist traditions' (UN Convention Rights of the Child 1989); Indigenous and Tribal Peoples convention (ILO Convention 169, 7). The Norwegian Framework Plan for Kindergartens (Norwegian Ministry of Education & Research 2017) states that the overriding principle that applies to all kindergarten activity is that the best interests of the child shall be the primary consideration in all actions and decisions concerning the child (Article 104 of the Norwegian Constitution; Article 3, No. 1, UNCRC).

From a socio-cultural perspective, learning can be viewed as relational, contextual, and social (Vygotsky 1978); knowledge is constructed or made in the community of which one is a part. Learning can be argued to be situated and social as it is tied to what happens in a context, together with other people (Nordtømme 2012). For example, in Norwegian kindergartens children are often

organised in small mixed-age groups; the underlying philosophy of mixed-aged groups is that the youngest benefit from having the eldest as role models and the older children benefit from supporting and interacting with younger members of the kindergarten with opportunities to build peer-group relations and friendships among the children (Norwegian Ministry of Education & Research 2017). This marks a shift from the predominantly age and stage based childcare practices in England, where children are normally grouped by biological age with no explicit recognition of the UNCRC in the statutory guidance (DfE 2021). Our paper ‘sees’ the absolutes in recognising the UNCRC and valuing humanistic, child/person centred approaches, but we also recognise how *humanism* could be seen as a benign, friendly word, associated only with notions of self-actualisation (Brookfield 2011). As we confront global sustainability issues, we embrace the ‘expanded rights framework’ arena (Davis 2014) with ‘foundational rights, agentic participation rights, collective rights, intergenerational rights and bio/ecocentric rights’ (23) to ‘foster children’s ability to think critically, act ethically and show solidarity’ (Norwegian Ministry of Education & Research 2017, 10). The learning areas are noted as substantially the same as the subjects that the children will subsequently encounter at school (Norwegian Ministry of Education & Research 2017) with the areas of communication, language and text, body movement, food and health, art, culture and creativity, nature, environment and technology, quantities, spaces and shapes, ethics, religion and philosophy and local community and society (47–55). The characteristics of ‘curiosity, exploration and creative activity’ are cited as ways for children to develop knowledge and skills in the areas of learning (Norwegian Ministry of Education & Research 2017, 47), and as children engage *with* the environment to construct meaning to satisfy innate curiosity, learning is seen as something that happens while interactions take place (Rogoff 1990; Aasen, Grindheim Torunn, and Waters 2009).

Outdoor pedagogies

There is a wealth of research related to outdoor pedagogies. For example, Garden (2022) defines outdoor learning as that which is beyond the walls of the indoors and overcoming the confines of the indoors thereby supporting children’s holistic development. In the UK however, there is often a eulogising symphony regarding Scandinavian outdoor pedagogies as a homogenous pedagogical approach. Terms vary and a preview into Norwegian Nature Kindergartens by Knight (2009) highlights how ‘*Friluftsliv* was originally a Norwegian expression and is entrenched in Norwegian culture’ (4) with kindergartens providing ‘a variety of outdoor experiences and [use] nature as an arena for play, wonder, exploration and learning’ (Norwegian Ministry of Education & Research 2017, 53). In the UK, the notion of outdoor pedagogies is often related to Forest Schools, and we were keen to pay particular attention to the environment, which was cited by the kindergarten teachers as ‘a garden school space’. The adoption of the term ‘school’ played with our assumptions around Scandinavian outdoor pedagogies, as we viewed the later adoption of formal education in Norway as evidence that kindergarten pedagogies are valuable, and as Moss (2013) noted, ‘compulsory education is no longer viewed as the first act in the theatre of education’ (3).

This is also exemplified in the target for quality education (SDG4.2 UNESCO) with Early Childhood Development and universal pre-primary education as a key target. King (2017) helps us to think about the target for SDG 4 (4.2) which includes the ‘need’ to ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education. We argue that the readiness for school discourse remains a contentious issue for many (see Aitken 2018; Moss and Urban 2017) and the discourse in the Framework Plan for Kindergartens (2017) argues for ‘kindergartens to prepare children for active participation in society and help lay the foundations of a good life’ (8). As a Norwegian citizen, Sageidet (2014) explores Norwegian traditions and way of life and argues that ‘Norway, together with other Nordic countries, has a long tradition of close contact with nature and outdoor life’ (114) and offers a counternarrative, ‘as citizens of one of the world’s richest countries, Norwegians appear as, more or less, materialistically orientated’ (117), thus, ‘Norwegians, children, preschool teachers, parents and other citizens, live in

tension between Norwegian traditions, demands for environmental responsibility, and their individual orientation within late modernity ...' (117). In 2020, Elliot, Arlemalm-Hagser, Ji, Wang and Mackey, review the Norwegian context and argue that with sustainability explicitly noted in the revised Framework for Kindergartens (Norwegian Ministry of Education & Research 2017), the notion of 'a good life' demands 'thinking and acting at local, national and global levels and for early childhood educators to promote children's understanding that their actions today have consequences for the future' (62). They highlight that children are viewed as active and agentic individuals, able to express their views on matters that affect them.

John Dewey's theory of experiential education (1916/2007; 1938/1997) explains outdoor education experience as a lived experience with ideas of meaning emerging from experience. Dewey (1938/1997, 43) refers to 'trying' and 'undergoing'. Trying refers to the outward expression of the individual, the attempts by them within the environment. Undergoing refers to the ways in which the environment impacts upon the individual. This process is dynamic and reciprocal as it involves an impact on the environment by the individual as well as the impact on the individual by the environment. The allotment itself is a large open space with plots assigned to different schools, kindergartens and members of the community, and we argue that whilst outdoor pedagogies have been *territorialised* (Deleuze and Guattari 1987) into a global discourse, the 'Garden School' space can be *[de]territorialised* and *[re]territorialised* (Deleuze and Guattari 1987) by identifying the space as the product of interrelations with multiplicity and space as co-constitutive (Massey 1995). A learning space is always under construction and a co-constructive understanding acknowledges a relational dynamic between the children, culture, risk and the 'Garden School' space that they inhabit and help to shape (Garden 2022).

The outdoor space

Moser and Martinsen (2010) explore Norwegian kindergarten's outdoor environments as pedagogical spaces. They argue that the term space includes the physical environment, presenting the kindergarten as an educational institution, that is, as a building, different kinds of rooms, the fixed installations, the furniture and other removable artefacts, the aesthetic design of the institutions and the objects that form the natural environment. The Norwegian Framework Plan for Kindergartens (Norwegian Ministry of Education & Research 2017) states that children should be afforded outdoor experiences and opportunities to discover the diversity of the natural world, with kindergartens helping the children to feel connectedness with nature but as Weldemariam and Wals (2020) argue, the dominant discourses around children being *taught* to be the rational, ethical child who cares for and safeguards the world, is an inherently anthropocentric view point which unintentionally overlooks agentic characteristics of the non-human world. Rather than 'using' nature (Norwegian Ministry of Education & Research 2017), they argue for recognition of 'an assemblaged world that he/she becomes with, and is affected by multiple non-human interactions' (13).

Places, spaces, and materiality are important within the everyday life of children in kindergarten. The physical environment creates possibilities for participation yet the values that are associated with place, space and materiality are also open to exclusions (Nordtømme 2012). Spaces can also consist of actions, the meaning-making of those involved in the institutions and the organisation of educational activities in space and time (Moser and Martinsen 2010). In this article, we will use our ethnographic fieldwork data to discuss the narratives that emerge in relation to these themes.

The Norwegian Framework for Kindergartens (Norwegian Ministry of Education & Research 2017) aims for children to develop a positive self-image through physical achievements and have positive experiences of outdoors activities (Norwegian Ministry of Education and Research 2017, 35). Most Norwegian kindergartens have access to the outdoors and nature areas in the immediate vicinity that are suitable for play and physical activity and regular walks are a feature of kindergarten practice. Considerable variation exists in time spent outdoors, depending on the season as well as the characteristics, focus and goals of the kindergarten.

Methodology

Design

When crafting this paper, we were drawn to playfully interact with a rhizomatic methodology (Deleuze and Guattari 1987), and we found resonance in the rhizome as a metaphorical way of conceptualising our observations and interactions in the community allotment. We were conscious that our semi-ethnographic observations were framed by our English centric assumptions associated with meta narratives around [espoused] Scandinavian outdoor pedagogies. We also acknowledge the familiar anchor of the English Early Years Foundation Stage (DfE 2021) and our regular critiques of the framework, including the language associated with statutory guidance for those working with children aged 0–5. The Norwegian Framework Plan for Kindergartens (Norwegian Ministry of Education & Research 2017) itself was unfamiliar terrain, thus, we navigated the discourse in the guidance and considered the juxtaposition of the lived experiences of the adults and children in a familiar environment of the community allotment or '*Garden School*'. Visual photography provided images which were considered, 'not to interpret what the [images] mean, but to find richness and vitality in the images ... no need to interpret, only to unfold, to increase the surface area of experience'.

Participants

This semi-ethnographic research included a group of twelve children aged between 3 and 6 years from a local kindergarten, where we engaged in naturalistic conversations with kindergarten pedagogues, (two male assistants and one female who led the group as the lead pedagogue), members of the local community, including allotment volunteers and a plot owner. Our observations of the interactions between children, adults and the spaces within the community allotment or '*Garden School*', included in situ, opportune moments, for example, we chatted to a member of the local community (via interpretation) and learnt that due to her 'advanced age' [verbatim quote], she was eager for the children to help her move the existing plants in her small plot, so she could use the space to plant new seeds.

We were also introduced to the lead support volunteer who was planting seeds and harvesting produce in the community greenhouse, and she explained the plan to sell the produce to local grocery outlets. This formed part of a support programme for female refugees to gain access to support networks in the city. In essence, there were no *key* participants, as the rhizomorphous nature of the research assumes no superior position, as within the realm of the rhizome, everything and everyone can be an actor (Deleuze and Guattari 1987).

Procedure

The ethnographic accounts were garnered during a one-day visit to the community allotment and this formed part of a fuller Erasmus schedule for the week. The approved ethics were shared with the university and the kindergarten and consent was gained for conversations with adults and observations of children. The allotment is a regular place for the kindergarten children to visit (3–4 days per week) and we met the teachers and children in the kindergarten before accompanying them on their familiar walk which lasted around 8 min. Children wore high visibility vests over their clothes and this identification helped the adults to manage safety in a safe and calm way. The walk was purposeful but unhurried and the interactions were incidental and took advantage of the familiar environment and included observations by the children of us as guests in their walk to the allotment.

We talked with kindergarten pedagogues while observing the slow-paced interactions between children and adults, and the rhizomorphous explorations helped us to explore Bakhtin's notion of

‘exploring voices and their authorship’ while acknowledging its ‘lived construction, enactment and interpretation by another’ (131). The lead pedagogue was able to cite the Norwegian guidance (Norwegian Ministry of Education & Research 2017), with regular excerpts articulated in relation to her fluid planning, and we were able to work as nomads (Deleuze and Guattari 1987) to consider the ‘ideologic, volitional nature of language’.

Findings

Inter-generational encounters

A vignette

Adjacent to the kindergarten community allotment space, we observed a lady digging in her allotment patch as she tended to her flowers. Attracted by the brightness of the golden marigolds, the children idled over to the plot and engaged in conversations, asking the lady if they could help. The lady invited the children to join her in the weeding activity. The activity involved selecting flowers to pull up to make room for new root vegetable seeds. The lady conversed with the children about which flowers to select, and the children were asked to dig the flowers out, including the bulbs. These were then to be re-planted back at the kindergarten. Some of the artful digging produced bulbs and flowers, and discussions around careful use of the trowels helped children to see the value of sensitively examining the soil around the bulbs to extract with care.

Here we observed what we refer to as, *natural, authentic intergenerational encounters*. On a surface level, there are clear connections to the Framework Plan for Kindergartens (Norwegian Ministry of Education & Research 2017) and the lead pedagogue easily espoused learning areas, with consideration of children’s ‘body movement, food and health’ and ‘nature, environment and technology’. Indeed, intergenerational programmes in early childhood institutions in Norway offer movements towards a more sustainable future (Oropilla, Ødegaard, and Quinones 2022) and as the research study illustrates, community allotments are places where different generations can meet and interact. The authors claim that this could mean children, parents, or grandparents, but also elderly people from the local community. The core values related to ‘Children and Childhood’ in the Norwegian Framework Plan for Kindergartens (Norwegian Ministry of Education & Research 2017) cites the kindergarten as a place that ‘helps prepare children for active participation in society and helps lay the foundations for a good life’ (8), with ‘sustainable development’ captured in the recognisable nomenclature from the Brundtland report (WCED 1987). The document highlights how, ‘people who are alive today can have their basic needs met without denying future generations the opportunity to fulfil theirs’ (10). The concept of a ‘good life’ is signalled by Davis (2014) as ‘an alternative social development concept focusing on the attainment of a ‘good life’, akin to the concept of sustainable living, only realisable within a community, and in a community that includes nature’ (31). Here we adopt what Davis (2014) terms ‘revisioning rights’ (21) with her five dimensions of rights which are ‘not mutually exclusive [as they] overlap and seep into each other’ (24). Her argument for a recognition of ‘collective rights’ bleeds as an ‘extension’ into intergenerational rights (28) and as a healthy anecdote to a blame culture between generations, the ‘chain of obligation’ (Davis 2014, 29) can be focused on ‘a moral and ethical position of our children towards their children’ (Davis 2014, 29). Kernan and Cortellesi (2020) argue for ensuring quality in intergenerational learning, thus, with lifelong learning clearly acknowledged, the value of this encounter facilitated a ‘transfer and exchange of knowledgefoster[ing] reciprocal learning relationshipsrecognising that for both generations to benefit, both groups need to give and receive’ (4) (Figures 1–3).

Our observational lens also helped us to notice more deeply and supported a reflexive visualisation of intergenerational learning beyond prepared or planned activities, with the children engaging with a member of their local community in an ‘extra familial’ context (Kernan and Cortellesi 2020, 3). This natural and informal interaction illustrated an authentic, intergenerational encounter with reciprocal returns, for example, the children saved the existing plants to repurpose and replant in their kindergarten, and their toil in the soil resulted in unhurried, rich communications related to biodiversity. Here the plants acted as conduits for complex conversations ‘seeing the organic wholeness

Emerging themes	Source of data	Theoretical renderings
Intergenerational encounters	Observations of lady tending her plot. Conversation with the lady via interpretation by kindergarten assistant. Naturalistic observations of children. Norwegian Framework Plan for Kindergartens (Norwegian Ministry of Education & Research, 2017). Photographic images.	Sustainability concepts Intergenerational learning Deleuze & Guattari Visual methodologies
Management of risk & respect for nature/sustainability	Conversations with kindergarten lead pedagogue/assistants .	Sustainability concepts Deleuze and Guattari Constructivism Social constructivism

Figure 1. Emerging themes and sources of data.

of nature ...where children, adults and [plants as] nature acted as distinct nodes in the web of nature, not as ‘other’ (Sageidet 2014, 116).

Elliot et al. (2020) cite the ‘adults’ role in ECE as supporting children to actively participate in a democratic society, where intergenerational equities are recognised’ (62) and Haraway (2015)

	<p>Naturalistic observations of children.</p> <p>Conversations with allotment volunteer.</p> <p>Norwegian Framework Plan for Kindergartens (Norwegian Ministry of Education & Research, 2017).</p> <p>Photographic images.</p>	<p>Post humanism</p> <p>New materialism</p> <p>Visual methodologies</p>
Space, place and flow for wellbeing	<p>Conversations with kindergarten lead</p> <p>pedagogue/assistants</p> <p>.</p> <p>Naturalistic observations of children.</p> <p>Norwegian Framework Plan for Kindergartens (Norwegian Ministry</p>	<p>Sustainability concepts</p> <p>Deleuze and Guattari</p> <p>Constructivism</p> <p>Social constructivism</p> <p>Post humanism</p> <p>New materialism</p> <p>Critical pedagogies of place</p> <p>Visual methodologies</p>
	<p>of Education & Research, 2017).</p> <p>Photographic images.</p>	

Figure 1 *Continued*

reminds us that ‘we need to make kin sym-chthonically, sym-poetically, [thus], ‘who and whatever we are, we need to make with – become with, compose with – the earth bound (161). This immersive approach with nature has been given explicit emphasis in the Scandinavian context (Weldemariam and Wals 2020), and as the children laboured alongside the adult *becoming with* ‘subjectivity as breathing’ (Murriss 2016, 7), their understanding of sustainability concepts married with



Figure 2. Reciprocal intergenerational encounters for learning with nature: Sharing Knowledge.

'understanding [our emphasis] as an autonomous act, internal and free, which does not depend on hierarchical structures' (Oates and Grayson 2004, 325).

Indeed Haraway (2015) helps us to summarise as she notes her purpose

to make 'kin' mean something other/more than entities tied by ancestry or genealogy Kin making is making persons, not necessarily as individuals or as humans. Making kin and making kind (as category, care, relatives without ties by birth, lateral relatives, lots of other echoes) stretch the imagination and can change the story. (161)

Management of risk and respect for nature

A vignette

As the kindergarten children climbed the branches of a tree, one of the assistants spoke to the group (in Norwegian). Our assumption was that the assistant was telling the children to be careful in case they should fall. We



Figure 3. Reciprocal intergenerational encounters for learning with nature: Planting.

asked for a translation as we were intrigued that the attentive audience subsequently engaged in lengthy conversations with the adults. 'Did you remind them not to hurt themselves'? We ventured, 'no' the assistant replied, 'I reminded them that the branch is fragile, and not to harm the tree'. The kindergarten assistant also reminded the children of their responsibility to decide how high they climbed the tree, and follow-up conversations highlighted that the kindergarten children were encouraged to manage their own risk, with the understanding that however high they climb, they also needed to be able to descend independently and safely.

There are many ways we could interpret our observations and as guests in Norway, we acknowledge that our meanderings between theoretical ideas were employed to help us avoid [many] blind spots. We embrace a banquet of early childhood theories and pedagogies that are steeped in historical, political, and cultural spheres and we also acknowledge posthumanism, new materialism and what Haraway (2015) registers as 'compost-ing' (161). A respect for nature and rights for nature are inherent in Norwegian culture (Sageidet 2014) and as such, Norwegians have a close cultural attachment to nature (Figure 4).

Norwegian kindergarten teachers aim to make use of the outdoor environment when working with young children in their care (Nordtømme 2012). The Framework Plan for Kindergartens (Norwegian Ministry of Education & Research 2017) cites childhood as having 'intrinsic value' and firmly proposes a 'holistic approach to children's development' (7) with 'well-being, friendships and play [featured as] essential' (8). It cites 'respect for human dignity and nature' (7) and 'world views which are entrenched in human rights law' (7). In the developing research field of early childhood education for sustainability, the powerful notion of the agentic child 'unwillingly emphasises the importance of the human and ignores that of non-humans, natural phenomena and their vital materiality' (McKenzie and Bieler 2016; cited in Weldemariam and Wals 2020, 16). With individualism centre stage in the English Early Years Foundation Stage (DfE 2021), and the learning area related to *Understanding the World* reduced to 'making observations and drawing pictures of animals and plants' (14), we bring together a temporary assemblage of [perceptions of] risk observed in the vignette, discourses around the concept of harm, and the intersubjectivity, or meeting of minds between



Figure 4. ‘Don’t harm the tree’.

children and adults as they grappled with post-anthropocentric narratives with transformative potential for sustainability.

Drawing on sustainability concepts, we acknowledge the importance of human rights law alongside ‘Rights of nature, [which] is a legal-political scholarship position that advocates for legal standing for the natural environment’ (Davis 2014, 30). Writing in the *Guardian* in 2019, Macfarlane highlights how Toledo residents drew up an emergency bill of right for Lake Erie in Ohio and argued that the ecosystem of the lake should be granted legal personhood. He further draws on work by Anna Grear citing the category of ‘a legal person’ as an error. Here she argues that this risks only having respect if things resemble human experience and characteristics. Macfarlane

(2019) also drew on research by Ballard, calling the bill of right document, Invisible literature of our Anthropocene moment.

Reviewing the images of the child populated tree, it is clear the children gravitated to 'the climbing tree' as a place to gather. A constructivist learning theory lens views development as grounded in people's values and knowledge, as they construct ways of understanding the world. Priority is given to the active mental life of the child, their understandings of the world and the subsequent ways that they act within it. These pedagogies aim to be child-centred and flexible and allow learners the freedom to control their own learning experiences, largely through play and exploration within a local natural environment (Garden 2022). This ecological approach considers nature itself as a natural learning environment and it has been given explicit emphasis in Scandinavian countries, with the 'relationship between nature and people' situated as a strong philosophy, and healthy child development as a supporting discourse, where children should 'develop their motoric competence by climbing trees, and up hills and mountains' (Maagero and Simonsen 2012, 85). Weldemariam and Wals (2020) question whether the focus on children's agency 'can actually transgress the ontological separation between the human child and the natural environment, or what is commonly referred to as 'nature' (16). They further argue that 'child centred approaches that aspire to build children's agency tend to present non-humans as a background for humans to act on or to be acted on' (16). Soper (2015), argues, that for the most part, when nature is discussed related to the *non-human* it is in a rather more concrete sense, to refer to that part of the environment which we have had no hand in creating. It is often 'used empirically to demarcate parts of the material world that is given prior to any human activity, from that which is humanly shared or contrived' (Soper 2015, 23). Nelson and Hodgins (2020) note how 'nature can be seen as a static curative backdrop for enhancing child development' (154) but we are encouraged by the emerging discourses.

Douglas recognises that risk is culturally constructed for example constructions of risk vary between cultures. Greve et al. (2019) carried out a comparative study to investigate practices in Norwegian and French kindergartens focussing on constructions of 'risk'. Within their study, they define 'risk' as a potential threat combined with an undesirable outcome (Burke and Duncan 2015, 77). Outcomes identified 'risk' in terms of 'risk' discourses in the society with both health-related and pedagogical 'risks' (Greve et al. 2019, 1).

Drawing on a social constructionist perspective in theorising risk and childhood we can move 'beyond socio-cultural views of the child as insufficient' (Davis 2014, 26). Contemporary, hyper-sensitised concerns in the UK regarding children's vulnerability may be reminiscent of fears of the modern world, and the inclination towards over-protection from which these fears manifest (Garden 2022). This is in stark contrast to the informal conversations with the kindergarten assistant who explained that, *'The branch is fragile and could break'* and *'If the tree branch breaks, there will be no apples in the Spring'*. The kindergarten assistant reminded the children not to harm the tree and the dialogue that ensued removed a false dualism between human rights and rights of non-humans. He asked what may happen if the children harmed the tree branch. Norwegian culture naturally assumes a deep tradition of fostering positive attitudes towards nature (Sageidet 2014, 114) and Norwegian philosopher Arne Naess, has 'inspired non-philosophers and people of all ages to think more deeply about how they live' (Sageidet 2014, 115).

Constructivist educational theories allow children to create meanings via their interactions with others around them, including other children and adults, as well as the local environment. Central to the outdoor pedagogical approach is the premise of children as co-constructors and not just as receivers of knowledge. Vygotskian theory proposes expert novice interactions as a key factor to fostering growth, and the tree as non-human kin, enabled conversations to bridge the gap between adult and children's level of competency by connecting the children's modes of thought and working jointly in what Vygotsky (1987) termed the zone of proximal development (ZPD). This is often seen as guiding the child to more advanced forms of thought (i.e. the adults understanding) by providing tools for thinking. Translations illuminated much more sophistication with the children opting to converse *with* the tree to determine mutual places of safety. Children discussed the height they chose to

climb while respecting both the physical structure of the tree and the tree as kin. Kinship across species divides can be honoured in language, in forest ecology's recent revelations concerning the underground mycorrhizal networks that connect individual trees into intercommunicating forests (Macfarlane 2019). Vygotsky's theory could risk 'supporting a form of ethnocentrism [where pedagogues] following this theory 'could simply place themselves in an unquestioned position of superior knowledge' (Oates and Grayson 2004, 309). In the allotment, Garden School context, the children listened to the adults but also saw the tree beyond its practical application, i.e. to produce and give apples in the autumn.

Inspirational research by Nelson and Hodgins (2020) in Canada argued 'in favour of curriculum and pedagogy as a lively, contingent more than human entanglement' (151). They worked with children on climate action pedagogies with trees and their reminder that 'for those of us influenced by Euro Western educational regimes, recognising trees as highly social beings requires us to stretch our understandings of sentience, time scales, and creative modes of relating'. They further draw on research by Wohlleben to remind us that 'trees communicate with each other in a number of complex ways including via vast wood wide webs' of mycelium networks underneath the forest floor' (Nelson and Hodgins 2020, 156). Through their research, they learned trees 'feed their young, sweat, sleep, scheme with others to outwit predators, nurse their dying, cooperate, and seed clouds to alter weather patterns' (Simard 2016 cited in Nelson and Hodgins 2020, 156)

The stretch and recomposition of kin are allowed by the fact that all earthlings are kin in the deepest sense, and it is past time to practice better care of kinds-as assemblages (not species one at a time). Kin is an assembling sort of word. (Haraway 2015, 162)

The importance of place, space and flow for well-being

A vignette

The children were directed by the adults (lead pedagogue and two assistants) to enjoy their area in the allotment while making sure they remained in sight of each other and the adults. There were no external ropes or fences to signify boundaries, but the children seemed comfortable and ambled in between spaces whilst creating their own [in] between havens. The Framework Plan for Kindergartens (Norwegian Ministry of Education & Research 2017) cites the need for kindergarten teachers to support children to be 'curious about natural phenomena' (52) and as a rhomboid of sunlight hit the rectangular wooden crate, the shape morphed into an isosceles triangle to signal a sunny day.

The allotment, *Garden School*, is also referred to as an urban garden and as 'an oasis in the middle of Oslo where school children can learn to grow plants and vegetables' (<https://www.geitmyraskolehage.no/>). Gruenewald (2003) 'takes a position that critical pedagogy and place-based education are mutually supportive educational traditions and he argues for a conscious synthesis that blends the two discourses into a critical pedagogy of place' (2). The website also notes the wider membership of 'the school garden, in interaction with the allotment garden is also a meeting place for people with different cultural backgrounds. Here, immigrant children, parents and grandparents, and ethnic Norwegians of all ages, meet around a community of interests' (<https://www.geitmyraskolehage.no/>) (Figures 5–7).

Here we are keen to acknowledge the allotment or Garden School as both a physical place with a large acreage, but also a 'critical pedagogy of place that embraces the link between the classroom and cultural politics' (Gruenewald 2003, 8). Conversation with an Allotment volunteer illustrated their support for refugees and migrants to Norway, thus, the volunteer was keen to highlight the constant battle to keep the large allotment space within the community and away from 'jaws of corporate greed' [verbatim quote] as the land is always under threat and surveillance for new housing in the city.

Soper (2015) considers parlance around *nature* and considers what Robert Goodwin termed, a green theory of value (add date). According to this theory, 'value is attributed to places created by natural processes, rather than by artificial human ones' (Soper 2015, 268). Kindergarten literally



Figure 5. Spaces for thinking: Walking in the garden.

translates into *a garden for children*, and we recognise place as a concept that corresponds as a concrete location and an important context for what happens. It is also a concept that expresses belonging. As referenced on the website, Kindergarten in Norway is often considered a significant outdoor meeting place in a neighbourhood. We feel that kindergarten is a place of pedagogy, as expressed by Løvlie, as it is both concrete as a location and a place for relations, meaning-making and belonging. As Bourdieu (1988) states, space is both visual, akin to the physical environment of the allotment and invisible, such as the social space that the children encompass. 'In some kindergartens the children spend most of the day outdoors and might not have a building, but a lavvo (a kind of tent) with a small fire when they need to warm themselves' (Maagero and Simonsen 2012, 86).



Figure 6. Spaces for thinking: Swinging in the hammock.

The allotment, Garden school could be considered a hybrid environment, a place where, ‘place based educators do not dismiss the importance of content and skills, but argue that the study of places can help increase student engagement and understanding through multidisciplinary, experiential and intergenerational learning that is not only relevant but potentially contributes to the well-being of community life’ (Gruenewald 2003, 6).

Throughout this paper, place is considered to have an underlying meaning for the concepts of space and materiality (Nordtømme 2012). We recognise place as a concept that relates to space and materiality. Space is a product of inter-relations with space not existing prior to identities/entities and their relations (Massey 2005). Massey highlights the distinction between ‘space’ and ‘place’, where ‘place’ is the positioning of static objects such as those in nature and ‘space’ is the multiple interactions that occur between such objects (Agnew 2011; Garden 2022).

Employing a rhizomatic lens, we explored spaces for possible happenings in the community allotment and the Garden School as both a play space and political refuge. We felt that the children, as participants in the kindergarten, contribute to the social and cultural understandings of their play spaces.



Figure 7. Spaces for thinking: Making a den.

Children were able to move freely with creative encounters with empty wooden crates, low hung hammocks, and significant boundary markers such as an empty well. These smooth nomadic spaces acted as open spaces for creative thinking, rather than 'straited spaces [that] are closed spaces plotted by points and positions and are concerned with enclosing things linear and solid' (Deleuze and Guattari 1987; 361 cited in Sellers 2013, 18). We observed children carefully decorating small spaces, for example, the aesthetically beautiful décor of the wooden crates allowed hidden child sized spaces and these 'secret places' are generally viewed as pedagogically valuable (Moser and Martinsen 2010, 6) with spaces presenting a range of expectations for both children and adults. These spaces had a sense of purpose, and as such are not considered neutral in the Garden school as a place. The Plan for Kindergartens (2017, 9) cites there must be room for 'a spiritual dimension in kindergarten which should be used to instigate dialogue and respect for diversity'. In this context, the children experience a 'dwelling in nature' (Louv 2005, 113), where the young child is united with nature in terms of a 'spiritual ecology'.

These spaces also highlighted the validity of flow (Csikszentmihalyi 1975; Csikszentmihalyi, Abuhamdeh, and Nakamura 2005; Laevers 2005a, 2005b; Seligman 2011) for cultivating self-involvement and well-being. Research indicates that children's high level of involvement and well-being signal increases in physical motor activities that promote challenges and variations, for example, climbing a tree compared to free playground play. We observed the children taking part in what would be termed 'activities' in the Garden School, such as digging, weeding, and planting. We equally observed children fully absorbed with multiple actors, in multiple spaces where the concept of flow was characterised by the matching of high environmental challenges, for example, tree climbing and den making, with equally high levels of personal skills, the merging of

action and awareness, the loss of reflexive self-consciousness, a sense of control and a distortion of temporal perception (Csikszentmihalyi, Abuhamdeh, and Nakamura 2005). We observed the children being and becoming with the outdoor environment and this opportunity allowed the space and freedom for extended negotiation and varied meaning-making experiences. The Framework Plan for Kindergartens (Norwegian Ministry of Education & Research 2017) states that participation in such activity can be the first step in the development of a democratic community.

Conclusion

As we observed, Norwegian kindergarten leaders seem to value forms of 'risky play'. Mastering a physical skill may be a child climbing a tree or a branch whilst taking part in outdoor activities such as hikes and of course, being in nature has long been part of the Norwegian kindergarten tradition. Risk-taking can be seen as an integral part of nature and encourages the development of motor skills and physical fitness (Sandseter 2010). According to Moser and Martinsen (2010) almost three-quarters of 117 Norwegian kindergartens that responded to their survey allow children access to climbing trees and climbing walls. As Sandseter (2009) states children are the experts at finding the level of challenge that fits their skills, but it does depend on the environment providing the appropriate level of challenge. The benefits of nature may be dependent on the landscape.

Whilst the Norwegian Framework Plan for Kindergartens (2017, 4) notes that kindergartens shall encourage respect for human dignity by highlighting, valuing, and promoting diversity and mutual respect, further research could explore whether an inclusive Norwegian kindergarten, with its focus on outdoor physical activity is equally suitable for all children, regardless of age, gender, ethnicity and sociocultural background. Furthermore, we echo Weldemariam and Wals (2020) with their call for a 'post-anthropocentric perspective [that removes] the child as a self-privileged subject, but rather [as] a situated being within an agentic, assemblaged world that he/she becomes with, and is affected by multiple human and non-human actors and forces' (13). They further argue that this early childhood education for sustainability focus helps to 'recognise diverse ways of knowing that include affective learning, embodied learning and learning with others'.

Outdoor activities are embedded in the Norwegian Framework Plan for Kindergartens (Ministry of Education 2017) with the plan stating children should become familiar with nature and experience a sense of belonging with nature (Björger et al. 2022). We are cautious of over surveillance of children's worlds and acknowledge that our naturalistic observations were primarily drawn from observations and translations by adults from Norwegian to English. We wholeheartedly acknowledge our musings where children spoke to us 'through their play, their actions, and reactions' (Clark 2017, 24). We hope to return to the Allotment Garden School with the children in a follow-up visit to Norway and future research plans include working with the children to embrace the Mosaic approach as a framework for listening to the children (Clark 2017).

Disclosure statement

No potential conflict of interest was reported by the author(s).

ORCID

Angela Garden  <http://orcid.org/0000-0001-8055-6962>

References

- Aasen, W., L. Grindheim Torunn, and J. Waters. 2009. "The Outdoor Environment as a Site for Children's Participation, Meaning-Making and Democratic Learning: Examples from Norwegian Kindergartens." *Education 3–13* 37 (1): 5–13. doi:10.1080/03004270802291749.
- Agnew, J. 2011. *The SAGE Handbook of Geographical Knowledge*. London: Sage Publishing.

- Aitken, S. 2018. "State Paternalism, Postcolonial Theory and Curricula Content; Rabbit Proof Fence." In *Using Film to Understand Childhood and Practice*, edited by S. Aitken, 51–67. London: Bloomsbury.
- Alvesson, M., and K. Sköldbberg. 2018. *Reflexive Methodology: New Vistas for Qualitative Research*. London: Sage.
- Bjørger, K., B. Moe, P.-A. Wold, and C. Melis. 2022. "Children's Knowledge About the Origins of Food in Early Childhood Education and Care Institutions (ECEC) in Norway." *Education* 13: 1–12. doi:10.1080/03004279.2022.2049839.
- Bourdieu, P. 1988. *Homo Academicus*. Cambridge, UK: Polity Press.
- Brookfield, S. D. 2011. *The Power of Critical Theory for Adult Learning and Teaching*. Maidenhead, Berkshire: Open University Press.
- Burke, R. S., and J. Duncan. 2015. *Bodies as Sites of Cultural Reflection in Early Childhood Education*. London: Routledge.
- Clark, A. 2017. *Listening to Young Children*. London: Jessica Kingsley Publishers.
- Csikszentmihalyi, M. 1975. *Beyond Boredom and Anxiety*. Washington: Jossey-Bass Publishers.
- Csikszentmihalyi, M., S. Abuhamdeh, and J. Nakamura. 2005. "Flow." In *Handbook of Competence and Motivation*, 598–608. New York: The Guilford Press.
- Davis, J. 2014. Examining Early Childhood Education Through the Lens of Education for Sustainability; Revisioning Rights in Research in Early Childhood Education for Sustainability: International Perspectives and Provocations, 21–37.
- Deleuze, G., and F. Guattari. 1987. *A Thousand Plateaus: Capitalism and Schizophrenia*.
- Department for Education (DfE). 2021. Keeping children safe in education Statutory guidance for schools and colleges on safeguarding children and safer recruitment. Department for Education. Accessed November 26, 2022. <https://www.gov.uk/government/publications/keeping-children-safe-in-education--2>
- Dewey, J. 1916, (2007 edition). *Democracy and Education*. Teddington: Echo Library.
- Dewey, J. 1938;1997. *Experience and Education*. New York: Macmillan Company.
- Elliot, S., E. Arlemalm-Hagser, O. Ji, W. Wang, and G. Mackey. 2020. Synopsis. An Update on Countries Previously Represented in the First Volume (Australia, Japan, South Korea, New Zealand, Norway, Sweden, United Kingdom, plus China) in Researching Early Childhood Education for Sustainability: Challenging Assumptions and Orthodoxies, 54–68.
- Framework Plan for the content and tasks of kindergartens. 2017. Accessed November 26, 2022. <https://www.udir.no/contentassets/7c4387bb50314f33b828789ed767329e/framework-plan-for-kindergartens--rammeplan-engelsk-pdf.pdf>
- Garden, A. 2022. "The Case for Space in the co-Construction of Risk in UK Forest School." *Education 3-13 International Journal of Primary, Elementary and Early Years Education* 50 (8): 1–12. doi:10.1080/03004279.2022.2066148.
- Gleditsch, R. F. 2020. *Et historisk skifte: Snart flere eldre enn barn og unge*. Norway: Statistics Norway. (SSB).
- Greve, A., P. Garnier, Oddbjørg Skjær Ulvik, Ingvil Øien, Victoria Chantseva, Bjørg Fallang, Liv Mette Gulbrandsen, and Sylvie Rayna. 2019. "Food Practices and Risk Constructions in Norwegian and French Kindergartens." *European Early Childhood Education Research Journal* 27 (4): 494–505. doi:10.1080/1350293X.2019.1634236.
- Gruenewald, D. A. 2003. "The Best of Both Worlds: A Critical Pedagogy of Place." *Educational Researcher* 32 (4): 3–12.
- Haraway, D. 2015. "Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin." *Environmental Humanities* 6: 159–165.
- Hirst, N. 2021. "Understanding the World." In *The Early Years Foundation Stage: Theory and Practice*, edited by I. Palaiologou, 284–296. London: Sage.
- Kernan, M., and G. Cortellesi. 2020. *Intergenerational Learning in Practice*. London: Routledge.
- King, K. 2017. "Lost in Translation? The Challenge of Translating the Global Educational Goal and Targets Into Global Indicators." *Compare: A Journal of Comparative and International Education* 47 (6): 801–817.
- Knight, S. 2009. *Forest Schools and Outdoor Learning in the Early Years*. London: Sage.
- Laevers, F. 2005a. "The Curriculum as Means to Raise the Quality of ECE. Implications for Policy." *European Early Childhood Education Research Journal* 13 (1): 17–30.
- Laevers, F. 2005b. *Well-Being and Involvement in Care Settings. A Process-Oriented Self-Evaluation Instrument (SiCs)*. Brussel: Kind & Gezin. Downloadable at www.cego.be or www.kindengezin.be.
- Louv, R. 2005; 2010. *Last Child in the Woods: Saving Our Children from Nature Deficit Disorder*. London: Atlantic Books.
- Maagero, E., and B. Simonsen. 2012. "Constructing an Inclusive Culture in Kindergartens." In *Cross-Cultural Perspectives on Early Childhood*, edited by T. Papatheodorou, and J. Moyles, 77–88. London: Sage.
- Macfarlane, R. 2019. Should This Tree Have the Same Rights as You? Accessed September 1, 2022. <https://www.theguardian.com/books/2019/nov/02/trees-have-rights-too-robert-macfarlane-on-the-new-laws-of-nature>
- Massey. 1995. Thinking Radical Democracy Spatially. Environment and Planning D: Society and Space. First published June 1, 1995. doi:10.1068/d130283
- Massey, D. B. 2005. *For Space*. London, UK: Sage Publications.
- McKenzie, M., and A. Bieler. 2016. *Critical Education and Sociomaterial Practice: Narration, Place and the Social*. Bern, Switzerland: Peter Lang Press.
- Moser, T., and M. T. Martinsen. 2010. "The Outdoor Environment in Norwegian Kindergartens as Pedagogical Space for Toddlers' Play, Learning and Development." *European Early Childhood Education Research Journal* 18 (4): 457–471. doi:10.1080/1350293X.2010.525931.

- Moss, P. 2013. *Early Childhood and Compulsory Education: Reconceptualising the Relationship*. London: Routledge.
- Moss, P., and M. Urban. 2017. "The Organisation for Economic Co-Operation and Development's International Early Learning Study: What Happened Next." *Contemporary Issues in Early Childhood* 18 (2): 250–258.
- Murris, K. 2016. *The Posthuman Child: Educational Transformation Through Philosophy with Picturebooks*. London: Routledge.
- Nelson, N., and B. D. Hodgins. 2020. Unruly voices: Growing Climate Action Pedagogies with Trees and Children in Researching Early Childhood Education for Sustainability: Challenging Assumptions and Orthodoxies, 150–165.
- Nordtømme, S. 2012. The Outdoor Environment as a Site for Children's Participation, Meaning-Making and Democratic Learning: Examples from Norwegian Kindergartens, 317–333. Published online September 1, 2012.
- Norwegian Ministry of Education and Research. 2017. *Framework Plan for Kindergartens*. Oslo, Norway: Utdanningsdirektoratet.
- Oates, J., and A. Grayson. 2004. *Cognitive and Language Development in Children*. Oxford: The Open University.
- Ødegaard, E. E., and T. Krüger. 2012. "Studier av barnehagen som 'danning' sarena – sosialepistemologiske perspektiver [Studies of Kindergarten as Arena for Cultural Formation – Socio-Epistemological Perspectives]." In *Barnehagen som 'danning'sarena [Kindergarten as Arena for Cultural Formation]*, edited by Elin EriksenØdegaard, 19–49. Bergen, Norway: Fagbokforlaget.
- Oropilla, C. T., E. E. Ødegaard, and G. Quinones. 2022. "Kindergarten Practitioners' Perspectives on Intergenerational Programs in Norwegian Kindergartens During the COVID-19 Pandemic: Exploring Transitions and Transformations in Institutional Practices." *European Early Childhood Education Research Journal* 30 (5): 1–16. doi:10.1080/1350293X.2022.2073380.
- Rogoff, B. 1990. *Apprenticeship in Thinking: Cognitive Development in Social Context*. Oxford, UK: Oxford University Press.
- Sageidet, B. M. 2014. "Norwegian Perspectives on ECEFS: What Has Happened Since the Brundtland Report?" Research in Early Childhood Education for Sustainability: International Perspectives and Provocations, 112–124.
- Sandseter, E. B. H. 2009. "Characteristics of Risky Play." *Journal of Adventure Education and Outdoor Learning* 9 (1): 3–21. doi:10.1080/14729670802702762.
- Sandseter, E. B. H. 2010. Scaryfunny. A Qualitative Study of Risky Play Among Preschool Children. Doctoral Thesis, Norwegian University of Science.
- Seligman, M. E. P. 2011. *Flourish: A Visionary New Understanding of Happiness and Well-Being*. Free Press.
- Sellers, M. 2013. *Young Children Becoming Curriculum: Deleuze, Te Whariki and Curricular Understandings*. London: Routledge.
- Simard, S. 2016. How Trees Talk to Each Other [TED talk]. https://www.ted.com/talks/suzanne_simard_how_trees_talk_to_each_other?language=en
- Soper, K. 2015. "The Discourses of Nature." In *Ecocriticism: The Essential Reader*, edited by K. Hiltner, 267–277. London: Routledge.
- Statistics Norway. 2021a. "Kindergartens." Statistics Norway (Statistisk sentralbyrå). Accessed 2 September 2022. <https://www.ssb.no/en/utdanning/barnehager/statistikk/barnehager>
- Statistics Norway. 2021b. "Sjukeheimar, heimetenester og andre omsorgstenester." Statistics Norway (Statistisk sentralbyrå). Accessed 2 September 2022. <https://www.ssb.no/helse/helsetjenester/statistikk/sjukeheimar-heimetenester-og-andre-omsorgstenester>
- Tillmanns, T. 2017. "Disruptive Learning: Re-orientating Frames of Mind Towards Becoming Sustainability Change Agents." PhD thesis, Dublin City University.
- UN Convention Rights of the Child. 1989. Accessed November 26, 2022. <https://www.unicef.org.uk/what-we-do/un-convention-child-rights/>
- Vygotsky, L. S. 1978. *Mind in Society: The Development of Higher Psychological Processes*. Cambridge, MA: Harvard University Press.
- Vygotsky, L. S. 1987. "Thinking and Speech." In *The Collected Works of Lev Vygotsky*, Vol. 1, Translated N. Minick and edited by R. Rieber and A. Carton. New York: Plenum.
- WCED. 1987. *Our Common Future. A Report from the United Nations World Commission on Environment and Development*. Oxford: Oxford University Press.
- Weldemariam, K., and A. Wals. 2020. "From Autonomous Child to a Child Entangled Within An Agentic World - Implications for Early Childhood Education for Sustainability." In *Researching Early Childhood Education for Sustainability – Challenging Assumptions and Orthodoxies*, edited by S. Elliot, E. Arlemalm-Hagsér, and J. Davis, 13–24. Routledge.
- Young, R. 1995. *Colonial Desire: Hybridity in Theory, Culture and Race*. London: Routledge.