

This is an electronic reprint of the original article. This reprint may differ from the original in pagination and typographic detail.

A Quilt of Practices: Sustainability Education in Finnish Early Childhood and Care

Furu, Christin

Published in:
Finnish Early Childhood Education and Care

DOI:
[10.1007/978-3-030-95512-0_17](https://doi.org/10.1007/978-3-030-95512-0_17)

Published: 03/06/2022

Document Version
Submitted manuscript

[Link to publication](#)

Please cite the original version:

Furu, C. (2022). A Quilt of Practices: Sustainability Education in Finnish Early Childhood and Care. In H. Harju-Luukkainen, J. Kangas, & S. Garvis (Eds.), *Finnish Early Childhood Education and Care : A Multi-Theoretical Perspective on Research and Practice* (1 ed., pp. 241-255). Springer. https://doi.org/10.1007/978-3-030-95512-0_17

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

A Quilt of Practices: Sustainability Education in Finnish Early Childhood and Care

Abstract

In recent years, there has been a major shift in how sustainability issues are addressed in Finnish early childhood education and care (ECEC) policy and research. Sustainability education has come to the fore through changes in legislation and national core curricula. This chapter aims at providing an glimpse into how practitioners understand and address sustainability education. Through four narratives, based on empirical research within a qualitative framework, the highly variable implementation of policy and research into practice is made visible. The results show that sustainability is expressed in terms of *everyday choices*, *life-guiding values*, *pedagogy linked to specific places in Nature*, or as *silence*. In order to make sure that children's right to develop necessary knowledge, skills, values and attitudes for living sustainably is realized, the importance of providing high quality sustainability education for all children is underlined. The chapter ends with a provocation to enhance future dialogue between different stakeholders in order to overcome the gaps between policy, research, and practice and thereby facilitate urgent change towards a sustainable world.

Introduction

During the past few years, sustainability education have gained ground internationally as well as in Finnish ECEC. Whilst educational policy and research around sustainability issues have developed rapidly, there is still uncertainty concerning the implementation of policy into practice. Through the renewal of the *Act on Early Childhood Education and Care* in 2015 and the revisions of national core curricula (NCC) for both early childhood education and care (primarily targeting children aged 0-5 yrs) and for pre-primary (primarily targeting children

aged 6 yrs), sustainability has been expressed as a basic value and an issue that should permeate ECEC. Finnish ECEC aims to promote the wellbeing, growth, and learning of all children in an equal manner and to support their development as active participants in society. This is in itself an example of sustainability, but also reflects the fact that Finnish education in the early years rests upon international agreements, such as the Agenda 2030 (United Nations, 2015) and the United Nations Convention of the Rights of the Child (UNICEF, 1989).

Since 2015, the Finnish Act on ECEC states that one of the aims of ECEC is to “guide him or her [the child] towards acting responsibly and sustainably” (Section 3, paragraph 8). Further, according to the NCC for the early years, all children have the right to develop the prerequisites for a sustainable life during their time in early years education (Finnish National Agency for Education, 2016; 2018). Sustainability is mentioned both as a basic value and as an aspect of the transversal competences (entities of knowledge, skills, values, attitudes, and will) that ECEC should support in children. It is also part of the education towards a democratic citizenship where children are seen as capable of acting in an ethical manner and making choices that are in line with a sustainable way of life. The NCC also express sustainability as a matter of organizational culture. Both the day-to-day life and the pedagogical activities should rest upon the principles of sustainability:

“The principles of a sustainable way of living are followed in ECEC, taking its social, cultural, economic and ecological dimensions into account. ECEC lays a foundation for ecosocial knowledge and ability, allowing people to understand ecological sustainability as the precondition for social sustainability and the realization of human rights.” (p. 28, Finnish National Agency for Education, 2018)

While the goal of sustainability education is expressed explicitly in the NCC, the means to reach it are expressed implicitly. Approaches to contents or forms are mentioned in the section on environmental education, but otherwise staff is expected to approach sustainability education guided by the same principles that guide the overall organizational culture i.e. through building learning communities where children and adults learn from and with one another. Consequently, there is uncertainty among staff as to how sustainability education could or should be conducted in ECEC (Repo et al., 2018; Repo et al., 2019). As the NCC do not provide specific guidelines for sustainability education in the ECEC, research on “best practices” and development of theory are valuable in order to strengthen implementation of policy into practice.

Finland has a long tradition of addressing matters related to sustainability (e.g. enhancing social equality and diversity, supporting nature contact or protecting the environment), but sustainability education is conceptually a relatively new entity. Furthermore, sustainability education has only recently been addressed systematically in ECEC teacher education (Wolff & Furu, 2018; Furu, Wolff & Suomela, 2018). Yet at the same time, the rapidly growing sustainability challenges in the Anthropocene face us with a new urgency to facilitate change (Elliott, Ärlemalm-Hagsér & Davis, 2020). Both staff, teacher educators, and researchers in the field of ECEC need to address these issues in new ways and with stronger effort.

In this chapter, I will provide a view of how sustainability education is currently understood and addressed in Finnish ECEC. The chapter relies on empirical research conducted in collaboration with practitioners in Finland between 2017 and 2019. The leading research interest has been to explore how staff understand sustainability education (with respect to

ECEC) at the conceptual level and address it at the practical and pedagogical level. The aim of this chapter is to present a view of sustainability education in Finnish ECEC during times of substantial change in ECEC policy and increasing public awareness of the magnitude of the sustainability crises in the world. As will be seen, staff and students within ECEC are eager to develop the education for our youngest in ways that strengthen their capacity to contribute to a better future for all and to support their resources for sustainable ways of living. Although the framework in terms of educational policy and research has developed notably during the past few years, the implementation to practice is still in progress. Hence, I will discuss some implications for further development of research and policy, as well as for practice. Within Academia, we might listen carefully to the practitioner's perspective and engage in transformative dialogue around meaningful ways of promoting sustainability in ECEC and, eventually, a faster change towards a sustainable world.

Theoretical framework

In order to contextualize the research presented in this chapter, I will provide a theoretical framework which can serve as a lens for the interpretation of the empirical research presented as well as shed light on the development of sustainability education in Finnish ECEC. I will address some of the core concepts related to the topic and contextualize sustainability education within Finnish ECEC by providing an overview of how sustainability issues have previously been addressed and researched in early years education. I will then address some of the orientations within sustainability education in ECEC and finally address the contemporary perspectives in theory and research.

Core concepts

There are several concepts used to address sustainability issues in contemporary early years education and research. I prefer to use the concept *sustainability* to refer to a condition where human life does not hurt any life (human or non-human) on Earth today or in the future (cf. Wolff & Furu, 2018). It entails that a healthy ecosystem, social and cultural justice must be the foundation for economy. Sustainability includes the complex linkages between social, political, environmental, and economic dimensions of human life. It highlights issues of fairness through questions and even critique of the current state of art. Sustainability is here used instead of the concept *sustainable development*, which has troubling connections a neo-liberalistic paradigm based on continuous economic growth (cf. Wolff, Sjöblom, Hofman-Bergholm & Palmberg, 2017; Ideland, 2019). The latter concept stems from the Brundtland Report *Our Common Future* (WCED, 1987) which states that a sustainable development must guarantee a good life also for future generations and it still occurs in both policy and research as well as in common language. It is also found in the *The Agenda 2030* (United Nations, 2015), which is currently the main international agreement concerning sustainability issues globally.

I use the concept *sustainability education* as an overarching term for the entity of formal and informal learning opportunities that are formed upon the view that children together with significant adults such as staff in ECEC can be active participants in processes of change towards sustainability. Sustainability education includes many forms of sustainability work in ECEC, such as daily routines, pedagogical approaches, and specific learning projects.

Sustainability education is a process that aims to foster values and attitudes and to develop knowledge and skills that make sustainable ways of living possible, now and in the future.

Sustainability education thus includes multiple perspectives and aims to support ecological as well as social/cultural and economic sustainability. It may cover a wide range of topics from

environmental education to building active citizenship skills and democracy, from developing emotional and social skills to protecting physical and mental health, or learning to cope with day-to-day life etc. Hereby, sustainability education in its broadest sense strives to strengthen *resilience* (the capacity to deal with adversities and challenges in constructive ways) in humans, but also in communities and in entire cultures. Sustainability education shares a common ground with expressions like *Education for Sustainability* (EfS), *Early Childhood Education for Sustainability* (ECEfS), *Early Childhood Education and Care for Sustainability* and *Early Education for Sustainability*. The concept sustainability education can also refer to university courses, continuous professional development, collegial developmental processes or training related to specific approaches or programs (e.g. Forest schools, Eco-schools, Rain or Shine-preschools) that are offered to pre- and in-service teachers.

The roots of contemporary sustainability education within Finnish ECEC

ECEC, in Finland as well as in other Nordic countries, has a long tradition of working with sustainability related matters (cf. Ärlemalm-Hagsér & Elliott, 2020). Already from its beginning in the mid 1800s, education for the youngest was related to Nature. Children's ability to care for plants, animals and the surrounding world was highlighted. Issues of social or cultural equality, promotion of health or mitigating poverty were inherent in the very idea of providing education for young children and ECEC was part of a broader social transformation. These influences were visible also during the first parts of the 1900s.

However, there is no evidence of a common framework for linking the seemingly separate issues of sustainability to each other or of understanding their interrelatedness at that time. There was no specific policy or research underpinning this early sustainability work, but it can be assumed that it was rooted in and reflected towards prevailing educational theory,

which in Finland was developing from a philosophical towards a more psychological interest in educational matters.

A major turning point was seen in the 1960s and 1970s when general awareness of environmental problems was rising. Since the Tblisi Declaration in 1977, sustainability has explicitly been stated as a priority in education (Davis, 2015). In the 1980s and 1990s there was increasing activity among ECEC practitioners in Finland, primarily with focus on the environmental dimension of sustainability. The first national strategy for environmental education was published in 1992 (UNESCO 1992), but ECEC was lacking a common guiding framework for how this policy was to be implemented into practice as there was no national core curriculum for ECEC at the time. By and large, the implementation was dependent on personal interest among staff in ECEC. In the beginning of the new Millennium, the structures of education for children aged 0-6 years in Finland were transformed and national core curricula for ECEC (Stakes, 2005) as well pre-primary (Finnish National Agency for Education, 2000) were introduced. With the introduction of national core curricula, environmental education was formally introduced within the realm of science education and with a strong focus on environmental education. Furthermore, issues of children's rights and participation and democracy education, as well as a focus on socio-emotional development were highlighted. The economic dimension of sustainability was not explicitly expressed in the NCC. At the time, no explicit references to sustainability were made, but policy is based upon humanistic values, including respectful relationships with other humans as well as Nature. Hence, the renewal of the Act in 2015 and the subsequent new NCC for ECEC and pre-primary represent a turning point in sustainability education in Finland. The concept sustainability is now widely used and the three interrelated dimensions are made visible both in basic values and with respect to transversal competences.

Previous research on sustainability in Finnish ECEC

Research on sustainability issues in Finnish ECEC is sparse and most studies were conducted before the new Act and the introduction of new national core curricula. Reunamo and Suomela (2013) have shown that staff primarily focus on learning and social relations, whereas ethical and participatory perspectives are weaker. Salonen and Tast (2013) have found that ECEC staff value sustainability issues as important, but that sustainability is incorporated with variability into everyday practices and pedagogy due to lack of time and knowledge. Salonen and Hakari (2018) conducted a study of sustainable lifestyle among ECEC staff in 2012. The study showed that there was a gap between thinking and behavior and that staff activity in non-governmental organizations in general narrowed this gap. In addition to these scientific studies, some Bachelor and Master theses that focus primarily on environmental education have looked into sustainability education within ECEC.

Recently, there have been research directed towards how sustainability issues are addressed in Finnish ECEC (Furu & Heilala, 2021; Furu & Valkonen, 2021; Furu & Kaihovirta, in progress). These studies show that sustainability is currently implemented with great variability in ECEC settings. There are teams that address sustainability extensively in all three dimensions, both in everyday routines and pedagogically, but there are also teams that have merely tread the path towards sustainability education at all. These results are in line with the described rhetoric-reality gap described by Ärlemalm-Hagsér and Elliott (2020). It has been suggested that incorporating the principles of sustainability into ECEC requires assessment at the team level and, if found necessary, development of the work culture. This underlines the role of leadership and constructive collegial relationships in ECEC and new

approaches to sustainability education. A study by Furu (2019) shows that sloyd (arts and crafts) can be a rich arena for sustainability education within ECEC.

When it comes to sustainability education in Finnish ECEC teacher education, research has shown that only a small proportion of student teachers have an extensive understanding of the concept *sustainable development* while most have a vague understanding of it (Wolff & Furu, 2018). Furthermore, sustainability education still has a weak position in ECEC teacher education at most universities (Furu, Wolff & Suomela, 2018). However, ongoing research shows that multimodal storytelling can be a fruitful way of addressing sustainability issues in ECEC teacher training and that subject integrated courses can facilitate students' learning processes in this field (Furu & Kaihovirta, 2020; Kaihovirta & Furu, 2020).

Orientations towards sustainability within ECEC

The development of sustainability education in Finland can be understood as a parallel to the international and Nordic endeavors. It can also be reflected against Weldemariam and Wals (2020) description of three main orientations towards sustainability within ECEC internationally: an ecological approach, a socio-critical approach, and an approach focusing on empowering children to actively participate in change towards sustainability.

The *ecological orientation* is prominent within the framework of environmental education, where learning *about* Nature, *in* Nature, and *for* Nature has been emphasized. In line with this, the major point of focus has evolved from emphasizing knowledge (about) to experience (in) to action (for). Nature contact is a key concept in this field and various forms of outdoor education, forest schools or eco-schools are expressions of this orientation. The *socio-critical orientation* is characterized by putting emphasis on issues of democracy and social justice.

Critical and creative thinking can be viewed as important aspects in this orientation and it questions prevailing power relations and seeks to support structural change. Hence, the political dimensions of education have been articulated and led to an increased focus on children's active participation. The *empowerment orientation* in turn has challenged romanticized views of children and childhood and instead supported a view of the child as capable and active in shaping its own world. This position requires citizenship skills, and consequently children must be educated in order to take active part in societal matters.

The awareness of the importance of sustainability education within ECEC has grown rapidly since the turn of the Millennium, both in Finland and internationally. For an overview of contemporary international research, please see Elliott, Ärlemalm-Hagsér and Davis (2020) and Huggins and Evans (2018). In recent years, focus has increasingly been put on how the challenges we are facing in the Anthropocene are adversely affecting the lives of children across our globe (Clark et al 2020; Siraj-Blatchford, Mogharreban & Park, 2016). As children and young people are important agents in the pursuit of sustainability, they must be included as active participants and change makers in societal transformation both within education and in the wider society. Children's participation has also been identified as a crucial part of their resilience (Sanson, Van Hoorn & Burke, 2019) i.e. the shared capacity to constructively meet challenges and adversities in life (Masten & Barnes, 2018). Thus, ECEC has an important part to play in developing sustainability and supporting resilience among children and communities.

Over the years, education for sustainable development has evolved as a pathway towards a better future. Sustainability education has been described as an arena for developing necessary awareness, values, knowledge, and skills for active participation. The UN Decade

of Education for Sustainable Development (2005-2014) shed light on the importance of holistic education for the youngest. In 2009, The World Organization for Early Childhood Education (OMEP) initiated a series of projects aiming at strengthening sustainability education within ECEC across the globe. OMEP has also created dialogue between policy, research, and practice through the ESD World Project, which has resulted in practical tools for assessment of sustainability in ECEC settings as well as in several research publications. More recently, the Agenda 2030 (United Nations, 2015) underlines the role of education, especially for the youngest, in SDG no 4.

Contemporary perspectives in theory and research

In line with the basic values of each orientation above and the key focus of each period of time and policy framework, specific contents and forms for sustainability education in the early years have been identified. Increasingly, an awareness of the context specific characteristics of sustainability education within ECEC have been described. For example, indigenous perspectives and place based approaches have come to the fore in recent years.

While the above described orientations have all been valuable in our evolving understanding of sustainability education within ECEC, they all stem from an anthropocentric worldview. In recent years, research in sustainability education in ECEC has increasingly included post-humanist and post-colonial perspectives as well as Deleuzian rhizomatic methodologies (Elliot, Ärlemalm-Hagsér & Davis, 2020). Wolff, Skarstein and Skarstein (2020) state that currently four ideas seem to drive sustainability education in the early years: *outdoor play and learning, competent child and agency, practice architecture, and posthumanistic approaches*. The idea of outdoor play and learning emphasizes children's interaction with the natural world as foundational in sustainability education, while the idea of the competent child and

agency directs focus towards children's active participation in sustainability activities. The idea of practice architecture points out ECEC settings as places where sustainability is practiced through collaborative action and personal wisdom. The fourth idea, the posthumanistic approaches, are based on relational worldviews and advocate pedagogical practices that foster children's understanding of themselves as entangled with the living and non-living world.

Taylor (2017) and Wals (2017) are among those who have made visible the need for making space for other parts of the Web of Life (i.e. the interconnectedness of living and non-living aspects of an ecosystem) to be included in our view of the world. Weldemariam and Wals (2020) suggest an orientation to sustainability education, which decenters the human and stresses the importance of children's entanglements within multiple human and non-human relations. Furu (2019) has suggested relational ontology as a basis for development of theory and practice regarding sustainability education within ECEC. This perspective entails relations both to oneself, to others and to all the living and non-living Nature. Further, it is founded upon the understanding of the interconnectedness of humans within the rest of the Web of Life, as well as on the mutual dependency between humans and life-supporting ecosystems.

In conclusion, for the time being, there are multiple understandings of what sustainability education within ECEC is in terms of its aims, contents and methods. These understandings are sometimes overlapping, sometimes expressions of various interpretations of ECEC itself. The quilt of understandings within the realm of policy and research can be expected to be reflected in practice in teacher education as well as in ECEC settings. This applies at the level of individual teachers, but also at the level of teams, leaders or entire organizational cultures.

In order to provide a more multifaceted view of sustainability education in Finnish ECEC, I will reflect the aforementioned policy and research perspectives against the perceptions of staff in ECEC settings.

Methodological framework

The empirical research on which this chapter relies was conducted between 2017 and 2019 in collaboration with staff in ECEC settings in Finland. The main interest behind the research was to explore what the current state of sustainability education in Finnish ECEC is. Focus was directed towards how staff understand and address sustainability issues in their work. As such, the research had an explorative and descriptive character.

The methodological approach was a *bricolage* (Denzin & Lincoln, 2018). A bricolage can be described as a quilt where small pieces of information about the phenomenon under study are sewn together in order to provide a multifaceted and broad view of it. It can also include different types of research materials that offer multiple perspectives on the phenomenon. The research materials are triangulated or crystallized in order for a multifaceted understanding of the phenomenon under study to emerge.

The research material consist of several types of information. First, mind maps (n=86) regarding the concept *sustainable development* were collected in four cohorts during continuous professional development lectures from November 2017 to January 2019. Second, ESD Rating Scale questionnaires (n=4) from a case study of four ECEC settings involved in a pilot research project on promoting sustainability in ECEC from October 2017 to August 2018 were utilized. These questionnaires provided information about how staff rate their daily life in ECEC in terms of sustainability work as well as descriptions of practices and

pedagogical approaches related to sustainability issues. Third, written accounts (n=4) or process diaries made by the same four teams during the study provided valuable insights into the development of sustainability work in ECEC. Fourth, participant observations (n=8) of day-to-day work in an ECEC setting were made from September 2018 to May 2019 during a case study of how intergenerational encounters can support sustainability education in ECEC. Fifth, a focus group interview (n=1) with three members of staff involved in this study was conducted. One of them was a teacher in ECEC, one a child miner in ECEC, and one was responsible for the activity group of elderly.

The research participants represent all types of team members in Finnish ECEC teams i.e. ECEC teachers, social pedagogues, and child miners. Naturally, they have different educational backgrounds. The distribution of age and years in profession are wide, ranging from newly educated staff to those who are close to retirement. The participants represent ECEC settings of various size, both urban and rural contexts, as well as various regions in Southern and Western Finland.

The research materials were analyzed through thematic content analysis (Denzin & Lincoln, 2018) and narrative analysis (Clandinin, et al 2016). Each type of research material was first analyzed separately, then interpreted against the other types in a hermeneutical process. The analysis and interpretation were guided by two recurrent questions: *How does staff understand sustainability education in the realm of ECEC?* and *How does staff practically and pedagogically address sustainability issues in ECEC?* The research process followed a quadro-hermeneutical approach (Furu, 2011) which means that descriptive and reflexive strands were intertwined during analysis and interpretation. The results emerging from the research materials were continuously contrasted against current policy and contemporary

research regarding sustainability in early years education. The process resulted in four narratives on sustainability education in contemporary Finnish ECEC.

Ethical aspects

The research follows the guidelines by the Finnish National Board on Research Integrity (TENK, 2019). All participants were provided with information about the aims of the respective sub-studies and formally agreed that the materials were used for research. In some cases, municipalities and/or leaders of ECEC gave their written permission that the materials were used for research. The participants were guaranteed anonymity and confidentiality and all during analysis and interpretation all research materials were coded in order to prevent bias.

Results

The overall results of the research presented in this chapter show that there is considerable variation as to how sustainability education is currently understood and addressed in Finnish ECEC, both at the conceptual level and at the level of practice and pedagogy.

The first narrative, which is also the most dominant one, depicts *sustainability education as matter of actions in day-to-day life*. It expresses sustainability education as a series of choices made by staff with respect to resources like food, energy, water or materials. This narrative reflects a consumer culture where individual choices are at the core. The narrative highlights the meaning of being mindful in everyday life. It focuses on good everyday habits such as giving value to and saving resources. Further, core items concern collecting and sorting trash, reusing materials for arts and craft, and spending time outdoors or in Nature. To some extent there is a focus on avoiding plastic or chemicals e.g. in toys or furniture in the settings. Co-

use of toys, games, and tools, borrowing books from the library or arranging a fleet market with the parents are other recurrent practices included in this narrative. Food is an important part of the narrative – it is preferably described as local, partly vegetarian, and to some extent even grown by the children themselves in gardens in the ECEC yard. To sum up, this narrative can be said to be colored with green: it is rooted in the environmental education tradition and departs from giving ecological sustainability a high value. The narrative pays attention to daily habits and actions as a path to teaching children sustainability. However, it is dominated by an adult centered view and it does only occasionally articulate children's active participation. Moreover, it does not openly support critical reflection over the anthropocentric worldview nor interrogation of the cultural values behind e.g. prevailing power hierarchies, the consumer culture or social injustices (cf. Ärlemalm-Hagsér & Elliott, 2020).

The second narrative, which is common but less prominent, is one about *sustainability education as life-guiding values*. It contains expressions of values like responsibility, respect, modesty or trust. Life-long learning appears as a value linked to children as change-makers for a better Future, but also to the idea that children should learn about sustainability in order to learn for life. Equality and democracy are also rationales linked to sustainability, however sparsely. This narrative brings to the fore issues of being careful with yourself, others, and the Planet. It emphasizes socio-emotional development, formation of collaborative communities, and pays attention to emotional security as the basis for development and learning. This narrative reflects a relational worldview, where mutual respect, responsibility, and care are seen as core values. It takes other forms of life into consideration in the sense that plants and animals are important in their own right and should be treated respectfully. Nature and walking with gentle steps on Mother Earth are foundational. Physical and/or mental health

and the importance of supporting these among children as well as staff is visible in the narrative. To conclude, a core idea in this narrative is to build compassion for the entire Web of Life and fostering an attitude of care (cf. Wals, 2017) is seen as a key aspect of this. A will to enhance social transformation towards more relational and inclusive structures can be traced in this narrative. Contradictory views on children are however seen in this narrative, as children are sometimes expressed as competent and agentic and sometimes as vulnerable and in need of protection (cf. Pramling Samuelsson, 2011).

The third narrative expresses *sustainability education as a pedagogy linked to specific places in Nature*. It highlights places like the forest, lakes or the sea as valuable environments for learning how to lead a sustainable life. Nature is expressed as an environment which is well suited for sustainability related learning, as it provides both experiences and relevant content. Another key feature in this narrative is the explicit focus on pedagogy. Experiential learning, phenomenon-based learning, as well as experiments, learning studies, and holistic learning are emphasized. In addition, it underlines the importance of being aware of the versatile affordances in various environments. Another approach mentioned is that of providing a set of pedagogical methods and materials in order to stimulate children's multifaceted learning. Paying attention to nature's cycles, composting and learning about plants and animals is viewed as valuable aspects of sustainability education. Likewise, storytelling, art projects, music, movement, literacy and numeracy work is related to the outdoor experiences. The Right of Public Access, which is highly valued in Finland, is associated to sustainability education by staff. Hence, this narrative reflects a view of children as robust, competent, and eager to explore the surrounding world together with staff. Further, it contains the understanding of nature contact and outdoor education as foundations for sustainability

education. This narrative corresponds with views that emphasize children's holistic learning, but lacks an explicit ambition to transform existing structures.

The fourth narrative expresses *sustainability education through silence*. This narrative emerges from what is not visible in the research material. It emerges from white pages in the mind maps, from what is not mentioned in the questionnaires and written accounts or from silences in the interview. This narrative suggests that there is a lack of language for sustainability education among staff in ECEC. In this narrative, even the point of view that children should not be worried by sustainability issues or that sustainability is not to be part of ECEC, is expressed. Altogether, this narrative can be interpreted as a reflection of the lack of sustainability related awareness, knowledge or skills among some members of staff. The narrative is to some extent understandable, since there are few specific instructions on sustainability education in the Finnish NCC for the early years. As most teachers have not had sustainability education as an element in their teacher education, they may have little or no theoretical or didactical points of reference in this field. Developing an understanding of sustainability education is thus dependent on either personal interest in sustainability issues or a being part of a team with a specific interest in sustainability education. Apparently, not all members of staff are part of an organizational culture that supports professional development in this domain.

Implications and recommendations for policy and praxis

All in all, the implementation of policy into practice varies from setting to setting and sustainability education is conducted both to varying extents (from none at all to permeating the pedagogical and practical work) and through a broad range of contents and forms.

Apparently, a common guiding framework which translates policy into practice is lacking.

The research upon which this chapter is based confirms the knowledge-practice and rhetoric-reality gaps described by Ärlemalm-Hagsér and Elliott (2020). It also makes visible a gap between the magnitude of the ongoing sustainability crises and the relatively sparse attention directed towards sustainability issues within ECEC practice.

The narratives reflect the three anthropocentric orientations that Weldemariam & Wals (2020) put forth, but show that the orientations are not pure, but rather entangled with each other. In Finnish ECEC settings, the ecological orientation is predominant and the socio-critical is expressed to some extent, while the empowerment orientation is hardly visible. There are only minor traces of ambition to reflect upon or question and transcend prevailing social and cultural structures. However, there are signs of relational ontology (cf. Furu, 2019) emerging through notions in the second narrative, which is based on values, attitudes and personal beliefs and which highlight the entanglement with the entire Web of Life and the importance of taking care of both the human and non-human world.

For the time being, children attending Finnish ECEC encounter highly variable approaches to sustainability education. Thus, there are no guarantees that ECEC supports all children's equal rights to develop the necessary knowledge, skills, values, attitudes or will to live a sustainable life or to develop their resilience in order to handle the ongoing sustainability crises in constructive ways. The results of the research presented in this chapter is in line with previous and ongoing research (Furu & Valkonen, submitted) of how sustainability is implemented in the organizational culture in ECEC. The policy in ECEC has recently been updated and sustainability issues are gaining increasing attention within the educational field. Issues like the ongoing corona crisis, refugee crisis, climate change, rapid loss of biodiversity, or the adverse circumstances for cultural minorities (nationally and globally) are increasingly

at the surface in public debate and social media. It can be expected that general awareness about sustainability challenges is growing and that staff in ECEC is increasingly eager to develop their understanding of how these challenges can be addressed within ECEC.

Although the goal of sustainability education is expressed in the Act and in the NCC, there needs to be development in terms of approaches. Contents and forms suitable for sustainability education in ECEC need to be made visible through both theory development and through empirical research. In recent years, sustainability education has been the focus of several developmental and/or research projects and the output of these are increasingly visible within the community of practitioners. Further, resources that translate policy and research into practice and that monitor and catalyze change towards sustainability in the organization culture need to be utilized. Sustainability education is a matter of knowledge and skills, but also of values, attitudes and will among staff. Thereby, it is closely linked to how members of staff view themselves in relation to both sustainability issues and to the aims of contemporary Finnish ECEC. This, in turn, highlights the importance of supporting professional development (pre-service as well as in-service) as a matter of both professional competence and professional identity. Promoting sustainability education is a matter of supporting transformation and change of the organization culture as a whole. Leadership plays a key role, but also building *cultures of learning* where children and staff can learn from and with one another. An implication of the research upon which this chapter is based, is that the dialogue between practitioners, teacher educators, researchers and policy makers needs to be strengthened in order to overcome the gaps between policy, research, and practice. This dialogue can provide a space for creating and embracing new approaches to sustainability education in ECEC which can guarantee each child the basic capacities for leading a

sustainable life and for contributing to urgent change towards a better future for People and Planet.

References

- Ärlemalm-Hagsér, E. & Elliott, S. (2020). Analysis of Historical and Contemporary Early Childhood Education Theories in the Anthropocene. In S. Elliott, E. Ärlemalm-Hagsér & J-Davis (Eds.) *Researching Early Childhood Education for Sustainability. Challenging Assumptions and Orthodoxies*. Routledge.
- Clark, H., Coll-Seck, M., Barnerjee, A., Peterson, S., Dalglish, S.L., Ameratunga, S., Balabanova, D., Bhan, M.K., Bhutta, Z.A., Borrazzo, J., Claeson, M., Doherty, T., El-Jardali, F., George, A.S., Gichaga, A., Gram, L., Hipgrave, D.B., Kwamie, A., Meng, Q., ... Costello, A. (2020). *A future for the world's children? A WHO-UNICEF-Lancet Commission*. *Lancet*, 395, 605-658.
- Clandinin, D.J., Huber, J., Menon, J., Murphy, M.S. & Swanson, C. (2016) Narrative Inquiry: Conducting Research in Early Childhood. In A. Farrell, S.L. Kagan & E.K.M. Tidsall (Eds.) *The SAGE Handbook of Early Childhood Research*. (pp. 240-254). SAGE.
- Davis, J. (2015). *Young Children and the Environment. Early Education for Sustainability*. Cambridge University Press.
- Denzin, N.K. & Lincoln, Y.S. (Eds.) (2018). *The SAGE handbook of qualitative research*. (Fifth edition.) SAGE.
- Elliott, S., Ärlemalm-Hagsér, E. & Davis, J. (Eds.) (2020). *Researching Early Childhood Education for Sustainability. Challenging Assumptions and Orthodoxies*. London: Routledge.
- Finnish National Agency for Education. (2000). *Grunderna för förskoleundervisningens läroplan 2000*. Finnish National Agency for Education.

Finnish National Agency for Education. (2016). *National Core Curriculum for Pre-primary Education 2014*. Finnish National Agency for Education.

Finnish National Agency for Education. (2018). *National Core Curriculum for Early Childhood Education and Care 2018*. Finnish National Agency for Education.

Furu, A-C. (2011). *Resa i röstens landskap. En narrativ studie av hur lärare blir professionella röst användare*. (Diss.) Åbo: Åbo Akademi.

Furu, A-C. (2019). Narratives on sustainability and sloyd in Finnish ECEC. *Nordic Studies in Education*, 39 (3) 198-213.

Furu, A-C. & Heilala, C. (submitted). Sustainability under way. ECEC organizational culture as an arena for supporting student teachers develop capacities for sustainability education.

Furu, A-C. & Kaihoviirta, H. (2020). Att möta barns klimatoro genom hoppets och handlingens pedagogik. In E. Pekkarinen & T. Tuukkanen (Eds.) *Lapsen oikeudet ja maapallon tulevaisuus*. Helsinki: Lapsiasiavaltuutettu.

Furu, A-C. & Kaihoviirta, H. (in progress). Developing sustainability education in Finnish ECEC – merging bits and pieces?

Furu, A-C. & Valkonen, S. (submitted). Gearing up sustainability work in Finnish ECEC – exploring the potential of the PROSUS self-assessment tool in continuous professional development.

Furu, A-C., Wolff, L-A. & Suomela, L. (2018). Premisser för hållbarhet i den finländska utbildningen av lärare inom småbarnspedagogik – en kritisk granskning av visioner och verklighet. *Utbildning och demokrati*, 27 (2) 59-80.

Huggins, V. & Evans, D. (Eds.) (2018). *Early Childhood Education and Care for Sustainability. International Perspectives*. Routledge.

Ideland, M. (2019). *The Eco-Certified Child: Citizenship and education for sustainability and environment*. Palgrave Pivot.

- Kaihovirta, H. & Furu, A-C. (2020). Kroppslig læring, visuelle praksiser og multimodale fortellinger i småbarnspedagogikk. In T. Østern (Ed.) *Kroppslig læring*. Oslo: Universitetsforlaget.
- Masten, A.S. & Barnes, A.J. (2018). Resilience in Children: Developmental Perspectives. *Children*, <https://doi:10.3390/children5070098>
- Pramling Samuelsson, I. (2011). Why we should begin early with ESD: The role of early childhood education. *International Journal of Early Childhood*, 17(1) 78-91.
- Repo, L., Paananen, M., Mattila, V, Lerkkanen, M-K., Eskelinen, M., Gammelgård, L., Ulvinen, J., Hjelt, H. & Marjanen, J. (2018). Varhaiskasvatus-suunnitelman perusteiden 2016 toimeenpanon arviointi. Varhaiskasvatussuunnitelmien käyttöönotto ja sisällöt. [Implementation evaluation of the 2016 national core curriculum for early childhood education and care – Deployment and contents of early childhood education and care curricula]. Julkaisut 16:2018. FINEEC.
- Repo, L., Paananen, M., Eskelinen, M., Mattila, V., Lerkkanen, M-K., Gammelgård, L., Ulvinen, J., Marjanen, J., Kivistö, A. & Hjelt, H. (2019). *Varhaiskasvatuksen laatu arjessa. Varhaiskasvatussuunnitelmien toteutuminen päiväkodeissa ja perhepäivähoidossa* [Every-day quality in early childhood education and care – ECEC curriculum implementation at day-care centres and in family day-care]. Julkaisut 15:2019. FINEEC.
- Reunamo, J. & Suomela, L. (2013). Education for sustainable development in early childhood education in Finland. *Journal of Teacher Education for Sustainability*, 15(2), 91-102.
- Salonen, Arto & Tast, Sylvia. (2013). Finnish Early Childhood Educators and Sustainable Development. *Journal of Sustainable Development*, 6(2), 70-85.
- Salonen, A.O & Hakari, S. (2018). Early childhood educators and sustainability. *Utbildning och Demokrati*, 27(2), 81-102.
- Sanson, A.V., Van Hoorn, J. & Burke, S.E.L. (2019). Responding to the impacts of the climate crisis on children and youth. *Child Development Perspectives*, 13(4), 201-207.

- Siraj-Blatchford, J., Mogharreban, C. & Parks, A. (Eds.) (2016). *International Research on Education for Sustainable Development in Early Childhood*. Springer.
- Stakes (2005). *Grunderna för planen för småbarnsfostran*. Handböcker 61. Stakes.
- Taylor, A. (2017). Beyond stewardship: Common world pedagogies for the Anthropocene. *Environmental Education Research*, 23, 1448-1461.
- TENK. (2019). *The ethical principles of research with human participants and ethical review in the human sciences in Finland. Finnish National Board on Research Integrity TENK guidelines 2019*. Publications of the Finnish National Board on Research Integrity TENK 3/20.
- UNESCO (1992). *A national strategy for environmental education*. Finnish National Commission for UNESCO.
- UNICEF (1989). United Nations Convention of the Rights of the Child. Retrieved from <https://downloads.unicef.org.uk>
- United Nations (2015). *Transforming our world: The 2030 Agenda for Sustainable Development*. United Nations.
- Wals, A. (2017). Sustainability by default: Co-creating care and relationality through early childhood education. *International Journal of Early Childhood*, 49, 155-164.
- WCED (1987). *Our Common Future*. Oxford University Press.
- Weldemariam, K. & Wals, A. (2020). From autonomous child to a child entangled within an agentic world. In S. Elliott, E. Ärlemalm-Hagsér & J- Davis (Eds.) *Researching Early Childhood Education for Sustainability. Challenging Assumptions and Orthodoxies*. (pp. 13-24). Routledge.
- Wolff, L-A. & Furu, A-C. (2018). Hållbarhetspedagogik för finländska barnträdgårdslärarstudenter: Från begrepp till engagemang. *Pedagogisk forskning i Sverige*, 23 (3-4) 214-234.

Wolff, L.-A., Sjöblom, P., Hofman-Bergholm, M., & Palmberg, I. (2017). High Performance Education Fails in Sustainability? —A Reflection on Finnish Primary Teacher Education.

Education Sciences, 7(1), 32. <https://doi.org/10.3390/educsci7010032>

Wolff, L-A., Skarstein, T. & Skarstein, F. (2020). The mission of early childhood education in the Anthropocene. *Education Sciences*, 10, 27. <https://doi:10.3390/educsci10020027>