

EECERA 2024 Sustainability SIG – Collated three papers for ‘SOS 4: Sustainability in ECE – Nature and the local outdoor environment’

Symposium abstract 111w/150w:

In this Sustainability SIG Symposium 4, we bring together perspectives from Norway, Australia and Portugal about the intersections between sustainability, nature and local outdoor environments. Research with teachers is a common thread among these papers, whether exploring teachers’ awareness about air pollution impacts for children outdoors, investigating sustainability in nature play settings or potentially transforming teachers’ relationships with the natural-cultural world. A range of quantitative and qualitative methods demonstrate the potential for engaging with teachers from more traditional questionnaires, surveys and focus groups to communities of practice, cartographies and narratives. In this symposium, we provoke deeper thinking and practice about early childhood education in outdoor environments alongside the dimensions of sustainability.

Chair: Sue Elliott

Paper	Authors	Title	Abstract	Key words
Paper A	Barbara Maria Sageidet & Todor Milkov Kesarovski & Petar Zhivkov	Urban kindergartens and air quality – how can awareness be used to develop children’s understanding of their urban environment	Globally, children increasingly grow up in urban environments. Research is needed on how to develop their experiences, knowledge, and participation as environmental citizens. This chapter explores how to promote children’s initial understandings of their intertwined urban environment. International research report challenges for citizens to use urban outdoor areas for recreation, due to concerns about air quality and pollution. Within a sociocultural paradigm, this qualitative study explores some kindergarten teachers’ and leaders’ answers to a qualitative questionnaire (Beckett & Clegg, 2007), regarding their awareness of, and knowledge about the air quality in the vicinity of their kindergartens in Stavanger. The informants were also asked if daily air quality variations may have consequences for their outdoor activities with the children, and how they may communicate on air quality with the children. Ethics include the confidentiality of all answers, and no questions or relations to any specific health issues of any children or adults in the kindergartens. The answers were analyzed, considering local air quality measurement data, and literature on air quality, health, sustainability, and	urban childhood, air quality, kindergarten, sustainability, Norway

			environmental citizenship. The study reveals untapped potentials in kindergarten teachers' and leaders' awareness of and knowledge about local air quality, and regarding their communication about this issue with the children. The study may increase both adult's and children's initial understandings of interrelationships between air quality, sustainability, health, and technology.	
B	Sue Elliott, Fran Hughes & Jo Bird	Searching for sustainability in Australian nature play programs: A policy-practice gap	The research aim was to examine early childhood immersive nature play programs (INPPs) in New South Wales, Australia inclusive of educator perceptions around sustainability. A nexus between nature play and education for sustainability has previously been described (Hughes et al., 2021). The Australian curriculum policy (AGDE, 2022) update now mandates a multi-dimensional sustainability principle be implemented across all early childhood services including INPPs. Contextually relevant research is needed to inform practice. The theoretical framework of social constructionism (Crotty, 1998) informs the chosen methodology. A mixed methods approach (Creswell & Plano Clark, 2011) draws upon the strengths of both quantitative and qualitative research and considers several data types to inform the project. The intent was to employ an explanatory, sequential design where the quantitative survey data findings informed the qualitative focus group interviews and further analysis. Ethical protocols were followed including participant consent, an anonymous survey and self-nominated focus group participation. Participant Information Sheets outlined the research methods and data usage. Inclusion/exclusion criteria for focus group participants were followed and ethical approval granted by University of New England. The data verified anecdotal evidence of increasing educator interest in INPPs across NSW with diverse service types involved. The participating educators offered limited, but varied insights about sustainability in INPPs, demonstrating a policy-practice gap. A policy update requires the upskilling of educators, particularly when a new principle, such as sustainability is mandated. INPPs offer dynamic settings for engaging in sustainability with children, we argue for resourcing, training and support for educators.	sustainability, curriculum, nature play, Australia
C	Folque, Maria Assunção Ilhéu, Maria & Almeida, Tiago	Becoming-with in the natural-cultural world: narratives of the Outgoing Community of practice	This qualitative study aims to discuss how outdoor practices with children and ECE teachers may transform their relation with the natural-cultural world. This study is part of the OutGoing project (Rasteiro et. al. 2023), a Community of Practice (CoP) of academics, teachers, and children searching for new ways of thinking, feeling and acting through outdoor experiences in ECE contexts. The theoretical framework of this study is anchored in the critical pedagogy using concepts such as Worlding, Becoming-with and	ECEfs; Cartography; Delicate Empiricism; Teachers'

			<p>Response-ability (Harraway, 2016). In a qualitative paradigm, this study analyses the teachers' practices with children using cartography (Almeida & Costa, 2021) and delicate empiricism (Ilhéu & Valente, 2019) in outdoor 'selected' places; it uses teachers' narratives and mini-stories produced throughout the OutGoing CoP as a way of listening to children and teachers. Participants' initial informed consent was followed by negotiated participation during the research process, allowing withdrawing from the study without a sense of failure. The main results suggest that: 1) the teachers' participation in the CoP contribute to a supportive way to introduce new practices; 2) Cartographies and delicate empiricism are two possible approaches to create time and space in ECE where children and adults reshape their interactions with the natural-cultural world; 3) mini-histories supported the emergence of children and teachers' narratives about the word. Results may inspire new practices and meanings in education for sustainability and impact policy recommendations that provide the conditions to strengthen children's and teachers in their relationship with the nature-cultural world.</p>	<p>Practices; Community of Practice</p>
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