

SPECIAL ISSUE EDITORIAL NOTE

Rethinking Play in Nature: Embracing Early Childhood Education for Sustainability

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Outdoor play was the norm when the guest editors of this special issue were children in the United States of America, Australia, and Sweden. We explored our respective natural worlds and the flora and fauna within, expanding our realm as we aged. We were not always kind to nature, but we constructed understandings of our own ecosystems because we were intimately part of them. We developed an environmental morality of sorts, ones that led us to edit this special issue. Today, researchers and practitioners are compelled to advocate for children to play and, more specifically, play outdoors. In fact, in his landmark longitudinal study, Roger Hart (1979) found that in just one generation, children were forbidden from exploring the reaches of their own parents, their degrees of freedom curtailed by parents who now guide their children's creative play and monitor their movements and moments alone. Very young children who were allowed to play outdoors with observations by parents from the house windows, were not affording their own children the same opportunities. Like Rachel Carson (1956), he maintains that we need to offer children *time* in natural settings where they can dream and reflect, to get lost in their space, while recognizing that adults who appreciate nature themselves and demonstrate an ethic of care are well equipped to engage children with the natural world (Roger Hart, personal communication, November 16, 2021).

We are understanding more about the long-term impacts of formative nature experiences on pro-environmental attitudes and behaviors (see Barrable & Booth, 2020; Broom, 2017; Chawla, 2020; Cheng & Monroe, 2012; Frantz & Mayer, 2014; Martin & Czellar, 2017), important referents for establishing a sustainability mindset. However, as Elliott and Young (2015) have pointed out, being in and romancing nature is not enough to address pressing contemporary environmental issues. They argue for critically reflective and transformative approaches to shift the pervasive nature/human dichotomy and more deeply engage with education for sustainability. To rest on our shared nostalgia for nature is perilous when globally sustainable futures for all, human and more than human, are under threat. Since our own childhoods, play outdoors is not all that has been lost; nature is declining and species are becoming extinct at accelerating rates. Animal populations have decreased by 70% over the past 50 years (Almond, et al., 2020). The Earth's 10 warmest years on record have all occurred since 2005. Seven of the 10 have occurred just since

2014 and the “top ten window” shifts forward in time each year (NOAA, 2021). Clearly, the interconnected web of life is frayed. As those reading this journal know, action is necessary to ensure positive futures for the world’s children. We must shift pedagogies toward educating for sustainability. More explicitly, sustainability is meeting “the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland & Mansour, 1987, p. 43), often encapsulated as intergenerational equity in early childhood education. Drawn from an environmental education focus on actions and issues, early childhood education for sustainability adopts a more ecocentric perspective; it promotes a frame of mind focused on understandings of human-nature relationships, its multicultural interpretations, and how we are all connected (Bonnett, 2002; Davis, 2005; Kopnina, 2014; Lang, 2007; Miller, 2014).

A focus on the Earth, to protect the planet through sustainable practices, is just one interconnected dimension of the United Nations (UN, 2015) global plan of action for people, planet, and prosperity in *Transforming our World: The 2030 Agenda for Sustainable Development*. Building on the eight ambitious Millennium Development Goals (UN, 2000) and other global initiatives, the 2030 Agenda encompasses 17 Sustainable Development Goals (SDGs) with numerous indicators of success that were adopted by all members of the United Nations in 2015 (UN, 2015). Arguably, should the goals be realized, the lives of all Earth’s inhabitants would be profoundly and positively transformed. Alarming, however, is that, with a rise in nationalism and political divide, governments and their leaders are not committed to participating in a global community, even when the need for international cooperation to address climate change and worsening inequalities is urgent (Ghosh, 2019; Saxena, et al., 2021). Yet, although Saxena et al. (2021) outline challenges in conceptualization, implementation, and evaluation of the SDGs, they also call for a dialectical and strategic interdisciplinary approach for optimizing current efforts that address the SDGs. Explicitly, they emphasize that the way forward is to focus on transformative learning, morally courageous leadership, and robust partnerships. This philosophical orientation underscores the genesis of this special issue of the *International Journal of Early Childhood Environmental Education*.

To position ourselves as editors of this special issue, we embrace the SDGs as critical for humanity and the planet. We are committed to investigating their interconnectedness with meaningful and evocative early childhood experiences facilitated by sustainably oriented and environmentally conscious adults. We acknowledge the criticisms targeted to the challenges and controversies surrounding the SDGs, including inconsistencies, measurement difficulties, financial investments, and interpretations as global indicators, particularly SDG 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all (King, 2017; Swain, 2017). Yet, in our call for abstracts, we emphasized that early childhood environmental education is where the SDGs can be distilled into theoretical, transformational, and relational practices. We asserted that pathways that transform socio-environmental-economic systems begin early and, as the Earth is at a critical tipping point for loss of biodiversity and climate change, it is essential that progress toward these goals be accelerated. Considering that sustainability is about complex systems based on relationships, educating for sustainability is not an “add on” to curricula, but a way of viewing curriculum, pedagogy, policies, and organizations – essentially a paradigm change for how to teach young children (Jickling & Stirling, 2017).

The six articles in this special issue highlight the field's awareness of the SDGs, understanding of ways to address them in practice, and educators' transformation of pedagogy when critical, reflective, and intentional approaches to teaching as inquiry are employed. Methodologies used across the studies were primarily mixed methods employing surveys or content analyses with an emphasis on qualitative data such as observations, narrative inquiry, and case studies. The authors, international scholars and practitioners, conducted their research in Australia, the United Kingdom, Denmark, Canada, and Sweden, countries where cutting edge practices in early childhood education for sustainability have been recognized for many years. Sorely missing from the issue, however, are research studies from the United States. We can only speculate on why this is so, but hope this issue inspires transformative pedagogies and innovative research studies in and beyond the United States across culturally diverse programs and environments.

The first article in this special issue, *SDGs and Early Childhood Environmental Education: Awareness, Understanding, and Transformation*, attempts to demystify the daunting 169 associated and integrated targets within the SDGs. Lisa Sonter and Sharon Kemp raise awareness of potential connections between policy, pedagogy, and the SDGs by analyzing alignments between the SDGs and Australian Early Childhood Education and Care policies. They provide examples of practice and argue that cross mapping the SDGs with the Australian *National Quality Standard* (ACECQA, 2018) creates a framework for reflection and transformation of pedagogies that underlie pathways to change.

Also in Australia, Kim Beasy, Sherridan Emery, Di Nailon, and Diane Boyd (UK), describe an intergenerational community skill-sharing program that provides formal and informal learning opportunities in their article, *Skills 4 Kids Cafes: Working to Support SDG 4 Through Delivering Early Childhood Educator Professional Learning in Partnership with Community*. They describe an interactional space that builds communities of practice and promotes lifelong learning for both community members and educators; one that challenges epistemological assumptions about teaching and sustainability. Through a convergent mixed-methods research design, the researchers investigated participants' learning, specifically as it relates to SDG 4 Global Citizenship. They expound upon the complexity involved in documenting intangible phenomena that is inherent in multi-age relationship building, raising awareness of sustainability issues, and lifelong learning when there are numerous opportunities for ontological shifts.

Halfway around the world from the two aforementioned studies, Nicky Hirst and Catherine Wilkinson investigated pre-service early childhood education teachers' views on caring attitudes and empathy within natural environments, particularly with regard to the important role of text and illustrations in children's storybooks. Their article, *Student Authors, Children's Literature and Early Childhood Education for Sustainability: Findings from a Pedagogic Research Project*, reported their findings as they align with the SDGs, specifically learning about the natural environment (SDG 15 Life on Land), gender inequalities (SDG 5 Gender Equality), and equal rights and responsibilities (SDG 10 Reduced Inequalities). They discuss the emerging themes of their research related to constructions of children, pedagogical purpose and different ways of knowing and call for mindful shifts towards a more critical praxis with young children.

In the issue's fourth article, Inger Lerstrup, Louise Chawla, and Harry Heft remind us that forest preschools emerged in Denmark in the 1950s. They describe the results from three case studies in their article *Affordances of Small Animals for Young Children: A Path to Environmental Values of Care*, particularly as they relate to SDG 15 which calls for people to protect terrestrial ecosystems and prevent biodiversity loss. Inherent in their article is the quest undertaken by teachers for a deeper understanding of natural phenomena and the affordances offered within forest settings, particularly because interactions with small creatures may contribute to children's long-term dispositions to protect forests and biodiversity.

Across the Atlantic, Elizabeth Boileau, Ziad Dabaja, and Debra Harwood report findings from their analyses of a national survey of educators working in outdoor nature-based programs in *Canadian nature-based early childhood education and the UN 2030 Agenda for Sustainable Development: A Partial Alignment*. They explored how nature-based programs address several SDGs while promoting the development of key competencies for children's engagement with issues of sustainability. Their three-way juxtaposition of the SDGs, UNESCO Early Childhood Guidelines, and outdoor nature-based learning benefits as perceived by Canadian educators elicits transformative thoughts for understanding and reframing practice.

The final article in this special issue offers insight into pedagogies that are transformative for children and their teachers. Eva Ärlemalm-Hagsér and Ingrid Pramling Samuelsson's article, *"Business as usual"? Or transformative and transactive teaching leading towards the Agenda 2030 goals in Swedish Early Childhood Education*, reports on Swedish early childhood education's new national objectives relative to the SDGs. They describe and discuss case study narratives that highlight Swedish curriculum goals that are explicit about viewing children as active social agents with the right to participate in decision-making. Narratives from early childhood teachers offer insight into the conscientious planning and practices implemented by skillful teachers who demonstrate how an ethos of sustainability transacts pedagogy.

Developmental science affirms that resilience and hope are dynamic processes in the human psyche with research demonstrating how protective factors may occur naturally or through interventions (Luthar et al., 2000; Masten, 2014). Given the threats to humanity and the environment, it is important that adults mitigate effects from these threats while bolstering hope and encouraging environmental engagement (Burke et al., 2018), themes that run through the articles in this special issue. As active agents in their own learning, young children are capable of engaging with complex environmental and social issues (NSTA, 2014), clearly demonstrated in several of the issue's articles. We were impressed by the thoughtfulness embedded in the reporting and discussion of the authors' research and truly hope their articles inspire significant shifts in thinking, research, and practice for IJEECE readers.

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