

‘climate barbarism’ as a form of climate adaptation. This represents a marrying of white supremacist violence with vicious anti-immigrant racism. A rise of far right politics globally and stricter border controls . . .’ (p. 22). And in the same spirit, it states that ‘politicians will not gamble their political careers on climate actions unless the public call for them to do so . . . short-term political pay backs will remain more popular than long-term environmental actions’ (p. 25). In my view, these and other strong political statements and accusations undermine the academic integrity of the book and its educational purposes.

Finally, it is recommended that educators who wish to use this book as a resource for teaching, critically evaluate the affordances and limitations of the book and consider these in relation to the particular socio-cultural settings, where teaching takes place.

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Reference

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Efrat Eilam, *PhD*, is a science and environmental education researcher and educator at Victoria University, Australia. Eilam publishes in the field of climate change education and acts as an advisor to climate change curriculum development at Israel Ministry of Education.

Researching early childhood education for sustainability: challenging assumptions and orthodoxies

Edited by: Sue Elliott, Eva Ärlemalm-Hagsér, and Julie Davis. Routledge, 2020, London and New York.

Reviewed by Christopher Speldewinde , School of Education, Deakin University, Waurn Ponds, Victoria, Australia.

Our planet is at a crisis point. Governments and policy makers are being held accountable by a mass movement to address climate change and adopt sustainable living practices. Educators have a pivotal role to play in this movement particularly in supporting today’s children to better understand sustainable practices. In among myriad declarations, policy, frameworks and academic discourse, comes a book that demonstrates the value of building young children’s understanding of sustainability. In this new, second edition of *Researching Early Childhood Education for Sustainability* (2020), the criticality of understanding and addressing humans’ impact on our planet is made clear. This book updates its first edition (Davis & Elliott, 2014) at an important juncture. It addresses themes of climate change, the Anthropocene and Indigenous ways of knowing the world and is particularly relevant as part of the broader context that has developed since

2014 which includes the School Strike 4 Climate movement (as symbolised by Greta Thunberg). A provocation and a call to arms, the book paints a sometimes-dire picture of the need to address a range of urgent issues we face in the present and the importance of imparting knowledge of sustainability to young children.

Following the editor's Introduction, titled 'Reframing the text, a second time' are three sections or 'Clusters' which examine firstly, ethics and values; secondly, historical, and sociocultural contexts; and finally, curriculum and pedagogy. The first and second clusters each comprise four chapters, the third cluster comprises eight chapters. Each cluster provides the reader with varying accounts of key themes of the sustainability and the lived experiences of Early Childhood Education for Sustainability (ECEfS). In reframing this new text, the editors acknowledge recent developments in early childhood education and care (ECEC). They recognise the frustrations with government and NGOs who have failed in their prioritisation of addressing climate change and global sustainability. The role of ECEC in the preparation of children as future citizens is critical as the next generation will be encumbered with the issues of global change currently besetting the planet. The editors view the contributions in this new volume as 'push(ing) the boundaries, critically challenging paradigms' (p. xxi) as they advocate for social and political change through ECEfS research.

The first 'cluster' commences with an analysis of ECEC theories in the Anthropocene. Årlemalm-Hagsér and Elliott (Chapter 1) discuss past research, the current gaps evident in considerations of knowledge-practice and rhetoric-reality and the problematisation of the relationship of child with nature. The authors challenge education's human-centric focus that often ignores the environment and recommend that, in line with the presently altering biosystems of the Earth, ECEC teaching and learning models need reconsideration if we are to achieve a sustainable future. Weldemariam and Wals (Chapter 2) continue the theme of challenging notions of anthropocentrism by positioning the child as more than rational, ethical and agentic. They explore post-humanist and post-anthropocentric perspectives to propose the child to be more than 'a fixed autonomous and self-privileged subject, but rather a situated being within an agentic, assemblaged world' (p. 13). Recognising how children think and learn with the natural, non-human world, is particularly important in ECEC where sociocultural and developmental pedagogy have remained a dominant paradigm. Harwood et al. (Chapter 3) introduce the reader to a North American example of Indigenous ways of being, knowing, and acting. They challenge readers to disrupt the discourse and notions of entitlement and exceptionalism associated with settler colonialism while questioning the 'inspiration, narratives, and intersections possible when we think more deeply, take time to listen, wonder, learn to be affected by, and rejoice with the multiple stories of place in mind?' (p. 25). Almeida (Chapter 4) draws upon her personal experience of post-colonial India, through examining human-nature relationships, images of children, and sustainability. Almeida confirms the enormous challenges experienced by young children in India who face cultural inequities in accessing ECEC. Almeida's view is that India's way forward is to provide ECEC access to all children to prepare them for school entry and to acknowledge the value that ECEC has in children building strong relationships with the natural world.

The book's second 'cluster' commences with Elliott et al. (Chapter 5) updating the first edition's (2014) discussion on a number of ECEfS contexts. Revising the situation in Australia, Japan, South Korea, New Zealand, Norway, Sweden, the United Kingdom and the U.S.A. plus a snapshot of Chinese policy in ECEfS, this chapter is an informative account of each context and demonstrates the transformational nature of ECEfS in the six years between editions. The declining situation facing us is evident through the disorganisation between ECEC stakeholder groups in formulating ECEfS professional education as well as ongoing confusion regarding conceptual understandings of sustainability, and continued misalignment between ECEfS policy and practice. The three remaining chapters in this cluster provide more detailed accounts of ECEfS in Germany

(Stoltenberg and Benoist-Kosler, Chapter 6), India (Almeida and Ohara, Chapter 7) and the U.S.A. (Carr and Plevyak, Chapter 8). Each provides valuable insights into the forces at play in each context including local and global policy driving ECEfS. Each chapter provides specific examples of the progress and challenges to progress in ECEfS.

Cluster 3, devoted to curriculum and pedagogy, considers a variety of different contexts in relation to ECEfS. Davis' and Davis' (Chapter 9) review of the ECEfS literature provides an interesting study that includes mapping and auditing of ECEfS within Australian universities' initial teacher education (ITE). It provides an account of the 'abysmal state' of ECEfS in Australian and global teacher education programmes (p. 122). The remaining chapters in this Cluster provide a wide range of perspectives and contexts that inform ECEfS. In Chapter 10, Sageidet et al. consider the intersections between natural sciences, physical education and sustainability in Norwegian ITE which are found to be mutually supportive in addressing UNESCO key competencies for sustainability. The first of two chapters on Australian contexts, Grogan and Hughes (Chapter 11) report on Australian bush kinders and their role as a nature-based place to support ECEfS. Nelson and Hodgins (Chapter 12) write of the 'unruly voices' in their discussion of curriculum and pedagogy as 'lively, contingent, more-than-human entanglements' (p. 150). How children respond to trees and other creatures and the 'interspecies inseparability and vulnerability, rather than human supremacy' (p. 162) forms an important discussion in Chapter 12. In Chapter 13, the Swedish example provided by Johannesson et al. outlines the role digital technologies play in generating sustainable waste practices. From this chapter we gather an illustration of how educators' pedagogy can be applied to develop communities of practice. O'Gorman (Chapter 14) adopts a narrative approach to demonstrate the educator risk taking when developing teaching strategies that challenge traditional approaches to teachers' ECEfS work. This chapter is followed by Alici's (Chapter 15) discussion of the place of ECEfS in the Turkish teacher education system. The final chapter (Chapter 16) by Elliott and Pugh returns to an Australian example of early childhood education and the value of children's voices within a curriculum project approach in the outdoors.

Researching Early Childhood Education for Sustainability is a valuable addition to the emerging field of ECEfS. It was an engaging book to read and provokes thought on the importance that educators play in informing ECEfS. This text would make a valuable addition to pre-service teacher education courses as we seek to equip the next generation of early childhood educators with an understanding of the importance of imparting knowledge of sustainability to the children of today who will surely shape the planet's destiny.

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Reference

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Christopher Speldewinde is a Research Fellow and Sessional Academic at Deakin University and the University of Melbourne currently undertaking a doctorate at Deakin University that examines STEM teaching and learning in Australian bush kindergartens. Chris has a number of academic and practitioner publications regarding bush kindergartens. Chris works on projects involving multi-university research teams investigating issues in early childhood, primary and secondary school education. He also has interests in the implications of teaching out of field; policy and governance in education; and Girls in STEM.