


BOOK REVIEWS

Empowering Teachers through Environmental and Sustainability Education: Meaningful Change in Educational Settings – Melissa Barnes, Deborah Moore and Sylvia Christine Almeida. Oxon and New York: Routledge, 2021.

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The need to reorient teacher education to address sustainability has been promulgated by international entities such as the United Nations Educational, Scientific and Cultural Organization (UNESCO) (UNESCO, 2018), as well as by scholars (e.g., Ferreira et al., 2009; Hordatt Gentles, 2018; Laurie et al., 2016). Despite this need, UNESCO (2017) contends that this reorientation has not advanced farther enough. Scholars highlight various impediments to this reorientation including individuals' lack of conceptual understanding of sustainability, individuals' lack of capacity and confidence, lack of resources, lack of knowledge as to how to infuse sustainability education in teaching, challenges with overcrowded and standardised curricula, and institutional and ideological challenges (e.g., Hordatt Gentles, 2018; Zhukova et al., 2020). In their text *Empowering Teachers through Environmental and Sustainability Education: Meaningful Change in Educational Settings*, authors Melissa Barnes, Deborah Moore and Sylvia Christine Almeida attempt to redress these challenges by offering readers both theoretical and empirical insights drawn from their research study on early career teachers' Environmental and Sustainability Education (ESE) practices.

The authors situate the origins of their text as lying within the global environmental challenges facing the world community, citing issues such as the global population explosion, higher rates of urbanisation, trade wars, rising inequities and climate change, and positing that the response from the global community to-date has been inadequate. In particular, two events served as impetus for the book. First, the global COVID-19 pandemic, 'a direct result of a lack of respect for nature and biodiversity' (p. 3), and second, the 2020 Australian bush fires, 'unprecedented [in] size, intensity and frequency' (p. 3), a signal of the climate emergency faced by our planet. All of these issues foreground the need for ESE, the terminology deliberately chosen by the authors because it 'brings Environment to the foreground and links it to Sustainability without allowing the prepositions like "of," "in," and "for" to shift the focus in any way. It also keeps the term "Development" out, thereby allowing for a holistic rather than a resource-driven approach' (p. 6). In compiling this text, the authors particularly focus on teacher education given the importance of teachers in embedding and enacting sustainability in classroom and institutional contexts.

The central insights of the text emanate from the findings of a seven-month study focused on understanding how early career teachers working within different institutional contexts integrate ESE in their teaching practices; the role their identities (personal, professional and ecological) play in these practices and their negotiation of cultural norms within their institution as they seek to engage these practices. The research participants included nine primary school teachers and two

*The online version of this article has been updated since original publication. A notice detailing the change has also been published

early childhood teachers who, along with the three researchers and two representatives from community based organisations whose mandate was centred on sustainability, formed a community of practice. Significantly as well, the authors employed a combined narrative inquiry and research by design methodological approach, which ‘allowed for a non-linear, organic and interactive approach to capturing the experiential and emotion-laden stories of early career teachers that are frequently hidden from view’ (p. 158) and for the co-construction of solutions to the problems experienced by early career teachers in their efforts.

Each of the chapters that shares insights from the authors’ research study is useful. As one example, conversations emanating from the community of practice workshops offered insights ranging from the seemingly straightforward, such as the need to take ‘baby steps,’ given that the shifts in thinking towards ESE will take place over time, to the idea that teachers may sometimes need to use subversive means to engender the desired changes. With respect to the former thought, one early career teacher shared ‘that she had wished she had known about the need for *baby steps* earlier, as she had rushed in with an ESE idea for the whole school and was reprimanded by the principal for not asking for approval beforehand’ (p. 71). With respect to the latter insight, this challenged and ‘disrupted’ teachers’ thinking about their processes: ‘While laughter erupted around the notion of subversive and “sneaky” sustainable practices, it was also cause for serious contemplation and a reimagined sense of agency within their classrooms. Simple ideas around including small, hidden sustainability segments, ideas and/or routines in each teacher’s classroom were discussed, contemplated and considered as possibilities’ (p. 73).

As a second example, another chapter offers a discussion of some of the barriers to implementing ESE in early childhood settings and the debates surrounding youngsters as agents of sustainability. This forms the backdrop for some of the narratives from the teacher participants, such as Jessica, viewed by the researchers as a ‘pre-service teacher who had demonstrated a strong interest in sustainability at university’ (p. 100) but whose interest seems to have waned due to the lack of uptake from colleagues. ‘From Jessica’s stories it appeared that the documented resistance to include ESE in early childhood education was so pervasive amongst her fellow educators in her early childhood centre that it had filtered into Jessica’s pedagogical planning and teaching as well’ (p. 100). The authors then further analyse Jessica’s narrative in relation to her leadership role, her institutional culture and her personal, environmental and professional identities and share the positive shifts that began to take place as a result of her involvement in the research and the associated community of practice.

In navigating readers through the teachers’ journeys, the authors take us through various foundational checkpoints to augment our understanding of the wider context within which the participant teachers are situated. These checkpoints include overviews of ESE at various educational levels, associated curricular approaches and complexities involved in curricular change; identity and identity development; Foucauldian and Bourdieuan concepts and their relationship to teacher agency. The authors are able to present these discussions in a readable way that allows the ideas to be understood by even those for whom these concepts are new.

As the teachers’ journeys are chronicled, readers also are introduced to various pedagogical approaches to ESE such as whole school approaches, inquiry based and action learning and place-based learning as some examples. Another useful facet of the text is the ‘Looking to the Future: Hopeful Applications’ closing section of a number of the chapters, which offer concise summaries of key messages and applications from the experiences of the research participants.

This text is undoubtedly a valuable addition to the literature on ESE in general and, specifically, for those working within the field of teacher education as the insights shared are useful for informing teacher educators’ efforts as they seek to reorient teacher education towards sustainability. Further, pre- and in-service teachers can benefit from the participants’ experiences – both challenges encountered and successes gained – of attempting to integrate ESE in their individual practices and wider institutional culture. Although the study’s participants are based in Australia, the theoretical and empirical insights are constructive for those from various country contexts

given existing commonalities with respect to barriers teachers face in implementing ESE. Indeed, the frankness and transparency of these individuals offer teachers authentic and relatable experiences from which those in all country contexts can find inspiration. Additionally, as the authors themselves voice, this text is significant for policy-makers, given the wider policy context in which the teachers' efforts are situated.

References

- Ferreira, J., Ryan, L., Davis, J., Cavanagh, M., & Thomas, J. (2009). *Mainstreaming sustainability into pre-service teacher education in Australia*. Canberra, Australia: Australian Research Institute in Education for Sustainability.
- Hordatt Gentles, C. (2018). Reorienting Jamaican teacher education to address sustainability: challenges, implications and possibilities. *Caribbean Quarterly*, 64(1), 149–166.
- Laurie, R., Nonoyama-Tarumi, Y., McKeown, R., & Hopkins, C. (2016). Contributions of education for sustainable development (ESD) to quality education: a synthesis of research. *Journal of Education for Sustainable Development*, 10(2), 226–242.
- United Nations Educational, Scientific and Cultural Organization (UNESCO) (2018). *Education for sustainable development goals: Learning objectives*. Paris: UNESCO.
- United Nations Educational, Scientific and Cultural Organization (UNESCO) (2018). *Guidebook on education for sustainable development for educators: Effective teaching and learning in teacher education institutions in Africa*. Paris: UNESCO.
- Zhukova, O., Fjodorova, I., & Iliško, D. (2020). Novice teachers' beliefs and knowledge about education for sustainable development. *Acta Paedagogica Vilnensia*, 44, 34–44.

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Green schools globally – stories of impact on education for sustainable development - Editors – Annette Gough, John Chi-Kin Lee, and Eric Po Keung Tsang. Published by Springer Nature Switzerland AG, 2020.

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I have to confess when I received my copy of **Green Schools Globally – Stories of Impact on Education for Sustainable Development** I was not expecting a page turner but doing an initial quick flick I found myself an hour later deeply engrossed and indeed still turning pages relentlessly. For someone who has worked tirelessly for twenty years now in environmental education with no foot or weight in either academia or the education department but hands deep in the soil and devoted to helping prepare the next generation for systemic change and uncertainty, this book has been both insightful and reiterated my concerns about education. It is the first book that intentionally draws together the historic and current green schools experiences of a wide range of countries as told from within those countries. It aims for and achieves a lot. I welcomed the Series Editors Annette and Noel Gough's invitation to approach the book transversally setting aside my own preconceptions and judgements of green schools movements and looking to find the connections across the stories and with my own