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EDITORIAL NOTE

Provocations for the "next big thing" in Early Childhood Education for Sustainability (ECEfS)

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In the previous issue of IJECEE, Ruth Wilson's Editorial Note (2015) offered some salient points that I would like to build on in this issue's Editorial Note. Before identifying these points, as a personal reflection I recall that Ruth Wilson and I first communicated across the Pacific Ocean in the late 1980's. We shared our mutual professional interests in early childhood environmental education and plans for facilitating uptake in our respective countries. I recall letters from Ruth Wilson in the United States of America (yes, we corresponded by hard copy posted letters!) were a source of encouragement and validation for our attempts to introduce early childhood environmental education in Australia. Subsequently, the first practitioner guides for early childhood environmental education, Fostering the Sense of Wonder During the Early Childhood Years (Wilson, 1993) and Snails Live in Houses Too: Environmental Education for the Early Years (Elliott & Emmett, 1991) were published. As Ruth Wilson recognised in her Editorial Note (2015) there have been many developments in early childhood education since that time about 25 years ago, but advocacy and action for early childhood environmental education, or education for sustainability, is still much needed. The Earth has changed dramatically, human impacts on the Earth's ecosystems have created a new geological epoch, The Anthropocene (Steffen, Crutzen & McNeill, 2007) and there is no doubt that global temperatures are increasing (IPCC, 2014). I question whether the early childhood education field has kept pace and wonder how can we move forward with renewed vigour and commitment in these globally precipitous times?

In the latter years of the *Decade of Education for Sustainable Development 2005-2014* (UNESCO, 2005a) the profile of early childhood education for sustainability (ECEfS) increased from something novel to recognition that 'investments to build their [young children's] awareness, values, knowledge and capacity for sustainable development will serve to set the world on more sustainable pathways now and into the future' (UNESCO, 2014a, p. 78). Also, ECEfS research has progressed significantly in recent years, from being described as a research 'hole' by Davis (2009) in her mapping review of published research papers, to a doubling of papers in a subsequent review by Somerville and Williams (2015). The first edited collation of research entitled *Research in early childhood education for sustainability: International perspectives and provocations* (Davis & Elliott, 2014) offers a further starting point for both researchers and practitioners in the field. In particular, Davis and Elliott (2014) alert readers to the predominance of research investigating early childhood curriculum and pedagogy and attribute this to a focus on practitioners and the pragmatics of implementing sustainability in early childhood settings to date. However, they do signal the need for an ongoing broadening of research foci as well as the underpinning theoretical frameworks and methodologies.

While these most recent achievements are to be acknowledged and celebrated, I return to Ruth Wilson's reflective pondering 'Yet, I sometimes sense that there is more to come – that the "next big thing" may be right around the corner if we can keep the momentum going' (Wilson, 2015, p. 6). There is no question in the current global uncertainties and with an ethical commitment to young children and their futures, all early childhood educators must keep the momentum going. But, what might be the "next big thing"? In this Editorial Note I offer three provocations as to what this might be, namely: investigating theoretical discourses underpinning ECEfS, moving

beyond 'nature by default'; and, engaging in critical and transformative pedagogies supported by professional learning for sustainability.

Investigating theoretical discourses underpinning ECEfS

While there are now several reviews and compilations of ECEfS research available (Davis, 2009; Davis & Elliott, 2014; Hedefalk, Almqvist & Östman, 2014), the most recent review by Somerville and Williams (2015) offers interesting insights about current theoretical discourses. They examined 46 early childhood environmental education and education for sustainability research articles published 2009-2013 across 19 early childhood or environmental education focused journals. They identified three main discourse categories: connection to nature, children's rights and post-human frameworks. Not unexpectedly, the connection to nature category predominates; researching the ready tangibles of nature and long-established affinities between children and nature but, they argue this discourse is under theorised (Somerville & Williams, 2015). The next smallest children's rights discourse category aligns with education for sustainability principles including intergenerational equity and the UNCRC (UNICEF, 1989). In Australia, this discourse is highly evident and Davis (2014) has proposed a revisioning of rights to additionally include active/agentic rights, collective rights, intergenerational rights and eco/biocentric rights. The least number of papers in the systemic review were focused on post-human frameworks, a relatively new discourse linked with ECEfS. Taylor (2013) in particular has advocated this discourse as a way forward beyond the romanticised images of the child in nature long-held in the early childhood education field. Further, post-human frameworks invite interrogation of the nature-culture binaries that Plumwood (2003) argues have led to the global sustainability challenges of today.

Overall, Somerville and Williams (2015) state methodologies and theoretical framing varied across the papers examined, but indicate that 'the field is characterized by many unexamined methodological and epistemological assumptions that tend to determine the direction and methods of the research' (p. 111). Could this be the "next big thing" to drive research forward? Interrogating assumptions, while deepening and broadening theoretical and methodological framing and ultimately, thus, shifting pedagogy and practice in the field beyond 'nature by default' (Elliott & Young, 2015).

Moving beyond 'nature by default'

There is much to be celebrated in the publications that have advocated and promoted nature in children's lives over decades ranging from Carson's seminal work (1956 republished 1998), to Chawla's Significant Life Experience research (1998), and the more recent popularisation of the cause by Louv (2008). There is no doubt that there are multiple benefits of play in nature for children (Munoz, 2009; Planet Ark, 2011) and the prioritising of play in nature over the last decade has been timely. Practitioner guides have offered strategies for naturalising playspaces (Nelson, 2012; Rivkin & Schein, 2014) and the forest preschool movement is now an international phenomenon across countries including Australia, Canada, Japan, Korea, New Zealand and the United Kingdom (Knight, 2013). In an era of increasing urbanisation and sedentary technology-based childhood pursuits, playing outdoors in nature is essential on many levels. As Moore and Marcus (2008, p.160) have previously stated play in nature is 'the cure for the lifestyle maladies of contemporary childhood'.

However, there is a concern that the romantic antecedents of the child in nature in early childhood education (Taylor, 2013) compounded by the recent popularisation of outdoor play in nature is interpreted by practitioners as how they should address education for sustainability. Somewhat simplistically stated, take children outdoors to experience nature and they will readily adopt sustainable worldviews and ethics and be active citizens for sustainability. Elliott and Davis (in press) refer to a sustainability-nature nexus, recognising the confluence of factors that have contributed over time to this interpretation. I suggest play in nature is a comfortable and familiar space for early childhood educators and there is a risk of 'nature by default' being the approach universally adopted, without critical examination of all the dimensions of sustainability (Elliott & Young, 2015). The conceptualisation of sustainability as multi-dimensional across natural, cultural, political and social dimensions is well acknowledged (UNESCO, 2010) and in early childhood education we must actively explore all dimensions with children. Potentially, developing programs through a more inclusive eco-socio-cultural lens for sustainability as

proposed in response to *Belonging Being Becoming: The Early Years Learning Framework for Australia* (DEEWR, 2009; Elliott, 2014). There are now examples of how this can be achieved in various Australian publications including Davis (2015), Sneddon and Pettit (2016) and Young and Elliott (2014), and; thus, children doing far more than 'caring for nature' is advocated.

Further sources of support for this rethinking are drawn from the work of Dickinson (2013) and Ernst (2015). In particular, Dickinson has critiqued the 'nature deficit disorder' diagnosis (Louv, 2008) and invites deeper investigation of the pathology. Also, Ernst (2015, p. 163) has questioned 'green centric' approaches and suggests that in an accountability-driven policy context there is potentially 'little room for viewing them [children] as visible and engaged decision-makers in their communities'. Lastly, in moving forward Ruhs and Jones (2016) outline strong approaches to sustainability underpinned by environmental preservation, the interdependencies of human capital and natural capital, balanced development within ecological boundaries and ethically strong positions. Embedding strong sustainability approaches in early childhood education is feasible, if educators critically rethink 'nature by default' and recognize that play in nature alone is just not enough to address the complexities of sustainability in the current epoch of the Anthropocene.

Engaging in critical and transformative pedagogies supported by professional learning

While education has long been touted as the vehicle for addressing global sustainability issues, from a critical theory stance it is acknowledged that more of the same education will not facilitate change. In early childhood education, there is an opportunity to shift beyond the comfortable pedagogies of role modelling and scaffolding caring for nature and engage in more challenging and responsive dialogic pedagogies exploring worldviews, ethics and values for sustainability. As Moss and Petrie (2002, p. 136) have previously stated pedagogy is not neutral, it is 'a political and ethical minefield in which choices are to be made'. Early childhood educators can participate with children in decision-making about choices for sustainable futures. Inevitably in decision-making processes there will be value conflicts, but 'conflicts allow for negotiations and open up possibilities for change' (Hagglund & Johannsson, 2014, p. 44). This is not about burdening young children with the challenges of sustainability, but engaging them in a supportive setting where dissentions and consensus can be constructively negotiated with others. An illustrative example is creating an ethic of picking plants for play: Which plants can be picked for play, when and how often, or do we only collect fallen plant materials from the ground for play? To invite all children to pick as many plants as they like from a natural playspace may lead to a denuded landscape, what limits can be negotiated with and by children and educators underpinned by an ethic of sustainability? Arlemalm-Hagser (2013) has identified the importance of such critical discussions about human relationships with nature where children are vocal participants.

A number of recent ECEfS research studies have advocated changes in early childhood education pedagogy to be more proactive for sustainability. For example, Cincera et al (2015) support emancipatory approaches informed by critical pedagogy, while Kelly and White (2013, p. 38) advocate active pedagogical roles and propose pedagogy as problem-posing with children. Further, Robinson and Vaealiki (2015, p. 113) argue 'it is essential to consider a shift towards more critical and transformative pedagogies that not only lift consciousness of sustainability issues, but also involve children and their families in advocacy and action'. These proposed pedagogical shifts for sustainability require educators to examine the theoretical discourses and assumptions as previously described, explore their understandings of sustainability and to critically reflect on their own worldviews and ethics, a significant and ongoing task.

Professional learning to address this task, both inservice and preservice, is an imperative at this juncture. UNESCO (2005b) has promoted reorientating teacher education for sustainability initiatives since 2005, but to date anecdotal evidence suggests few early childhood tertiary courses explicitly include sustainability. More recently, the *Global Action Programme for ESD* (GAP) (UNESCO, 2014b) has identified training educators as a key strategy for progressing education for sustainability; and, I argue there is nowhere more pressing for this to occur than in the early childhood field. The GAP (UNESCO, 2014b) offers leverage for professional learning providers including universities, vocational colleges and professional organisations to prioritise sustainability in their professional learning offerings. In Australia, early childhood education vocational training now requires completion of a

sustainability unit, but university offerings are limited. A recent Australian report has identified the need for ongoing professional learning to both 'demystify sustainability' and support educators to translate sustainability knowledge into pedagogical practice (Elliott, McCrea, Gaul & Newsome, 2016). Similarly, an international dialogue involving researchers from Australia, Korea, Sweden and the United States of America supports professional learning for practitioners as core to shifting pedagogy and world views for sustainability (Elliott, Carr, Arlemalm-Hagser & Park, in press). Timely reflection by various training providers about sustainability as integral to professional learning in the early childhood education field is long overdue and urgently required to facilitate broad and systemic change internationally.

In essence, more of the same type of education, whether with young children or as professional learning with adults will not facilitate global sustainability. There is a provocation here for critically rethinking pedagogy and how we progress sustainable futures for all, this is another 'big thing' to grapple with in the early childhood education field.

In concluding, I respond to Ruth Wilson's invitation in the last Editorial Note to complete the unfinished sentence 'We're a network of people who . . .' (Wilson, 2015, p.7). I argue we urgently need to be an international network of early childhood educators, academics and service or training providers who actively challenge and extend ECEfS research to more fully inform practice; seek to explore all the dimensions of sustainability with children, colleagues and families; engage with and advocate critical pedagogies for shifting worldviews; and, identify professional learning for sustainability as core to being an early childhood educator in these globally challenging times. And, yes Ruth, there definitely are 'dimensions below the surface that we're only beginning to understand' (Wilson, 2015, p. 7).

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