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Abstract

This paper explores the current public and policy interest in ‘children and nature’ from the perspective of a Higher Education Institution (HEI). It offers a conceptualisation of concern based on two competing discourses: one of environmental crisis; the other a crisis of childhood. It goes on to argue that rather than being in conflict, the two discourses are actually mutually reinforcing. An implication is that this is an agenda that requires an inter-disciplinary approach requiring those whose primary interest is in the environment to come together with those whose starting point is the child. This conceptual understanding underpins the approach adopted by one UK University in the ‘Connecting Children and Nature Network.’ This initiative is an example of how small-
scale seed-funding can generate significant impacts and is innovative because of its cross-disciplinary support. It is also an example of how Education for Sustainable Development (ESD) can be embedded through a tripartite model of engagement, teaching and learning, research and knowledge exchange activity. Since its inception further funding has been secured to support the Network and to develop a range of collaborative activities. Although successful, the process of building a partnership has been complex, revealing competing perspectives and agendas. The paper ends with a discussion of some of the lessons learnt and reflects on managing the partnership-building process as an HEI.

Keywords

Children, Nature, Education for Sustainable Development (ESD), Higher Education Institution (HEI)
Children and nature: a public and policy concern

“[R]esearch... shows that the connections between young people and nature are weaker now than in the past. Children are becoming disconnected from the natural environment.”

(DEFRA, 2011, p.12)

There is much concern about children and childhood in contemporary society (Palmer, 2007, Gill, 2007, Layard & Dunn, 2009, Furedi, 2010). A unifying thread of this concern is based on a perceived disconnect between children and the natural environment; a phenomenon memorably termed ‘Nature Deficit Disorder’ by the environmentalist Richard Louv in 2005. This disconnect is argued to result from a reduction in both the quality and quantity of children’s experiences with nature (Kellert, 2002). With respect to quality there are two factors at play: firstly, the nature of the contact (whether it is direct, indirect or vicarious) and secondly, the type of environment the contact takes place in (wild or domesticated). Kellert (2002) argues that children today receive far less direct contact (characterised as spontaneous and unstructured contact) with natural settings and rely increasingly upon indirect experiences (restricted, programmed and managed contacts) or representations and depictions of nature through communication technologies (vicarious contact). Equally, the continued loss and degradation of pristine wild natural environments mean that children have fewer
experiences of these high quality environments (Kahn, 2002). In any case, the evidence available suggests that the quantity of contacts children have with any kind of natural environment is declining. As reported by the Department for Farming and Rural Affairs (DEFRA) children are spending less and less time outdoors and the likelihood of children visiting any green space at all has halved in a generation. (DEFRA, 2011, p.12). This was also the conclusion of a report on changing relationships with nature across the generations commissioned by Natural England (England Marketing, 2009).

Kahn and Kellert (2002) go on to ask the provocative question – does this matter?

The growing public and policy interest in children’s relationship with nature would suggest that it does matter. Initiatives such as The Wild Network, The National Forest School Association’s ‘Love Trees Love Wood’, the National Trusts’ ‘Fifty things to do before you’re 11 ¾’ and the Royal Society for the Protection of Birds ‘Big Wild Sleep Out’ all aim to encourage children to connect directly with the natural environment.

Concerns about children and nature have also been high on the policy agenda. In 2011, the London Sustainable Development Commission commissioned a study to explore how children in London can be reconnected with nature (Gill, 2011b). Recognising the particular challenges and opportunities of the urban environment, the report came up with twelve recommendations to be implemented over the next twenty-five years. Equally, a key theme of the first government white paper on the natural environment for
20 years is ‘connecting people and nature for a better quality of life’. The White Paper states “we want to see very child in England given the opportunity to experience and learn about the natural environment” (DEFRA, 2011, p.44) and identifies the need to remove red-tape and provide more support to schools to facilitate this. Such initiatives are important and demonstrate the significance of the agenda but do not really address the question of why connections with nature might be important to children.

This paper will start by drawing upon theory and existing empirical evidence to develop a rationale for why connecting children and nature matters. It will then go on to detail the engagement of one Higher Education Institution with this agenda through the ‘Connecting Children and Nature Network’. The Network is an example of a successful partnership for change and is illustrative of how ESD can be embedded in Higher Education. The paper ends with a discussion of some of the lessons learnt and reflects on managing the partnership-building process as an HEI.

What is the concern? An environmental crisis or a crisis of childhood?

Research evidence about the significance and impact of contact with nature during childhood is “remarkably sparse” (Kahn & Kellert, 2002, p.vii). I want to start instead with a consideration of why a disconnect between children and nature might be seen to be significant. There are, I suggest, essentially two arguments or discourses based on
two competing constructions of the child. Researchers agree that ‘children’ and ‘childhood’ are not absolutes or universal concepts but are constructed by societies at a particular time and in a particular place. These constructions derive from a deep philosophical dualism. On the one hand, the child can be seen as ‘becoming’; as an adult in the making whose full value in society is yet to come in the future. On the other, they are conceptualised as ‘being’; as a social actor in his or her own right, active in engaging with the world and of value in the here and now. In this paper I will argue that these two constructions of the child give rise to two different interpretations of ‘the problem’: on the one hand it is perceived as an environmental crisis; on the other, a crisis of childhood. These will be explored in more depth in the following sections.

**An environmental crisis?**

From an ecological standpoint, ‘the problem’ is identified as the degradation of the natural environment; an environmental crisis. The significance of the connection of children and nature is firmly based on the ‘becoming’ child whose value is to be fully recognised in the future as a wise steward of the natural environment. This is epitomised by Louv’s (2005) question “Where will future stewards of nature come from?” (p.146): the claim being that time spent in natural settings as a child will influence attitudes and behaviours as an adult. But is there any research evidence to
support this position? Studies of environmentalists by Tanner (1980) and Palmer (1993) in the US and UK respectively found that spending time in natural environments as a child was formative in their career choices. As Tanner (1980) argues “youthful experiences of outdoors in relatively pristine environments emerges as a dominant influence in these lives” (p.23). However, it is not possible to discern cause and effect from this qualitative evidence. In his extensive review of empirical research to explore claims about the benefits of experiences with nature during childhood, Gill (2011a) found strong evidence that “spending time in natural environments as a child is associated with adult pro-environment attitudes and feelings of being connected with the natural world, and is also associated with a stronger sense of place” (p. 8).

Environments vary in quality. Wells & Lekies (2006) distinguish between ‘wild’ and ‘domesticated’ nature. In their study, whilst childhood experiences of both wild and domesticated nature had a significant direct effect on adult environmental attitudes, it was participation with wild nature that had the greatest direct effect on environmental behaviours. Age also makes a difference with researchers agreeing that it is exposure during middle childhood, that is the period between ages six and twelve, which is the most significant. Kellert (2001) concurs that direct experiences of pristine nature during this period are “significant, vital and perhaps irreplaceable” (p.139). These experiences are significant not only in developing pro-environmental values and beliefs (evaluative
learning) but also in acquiring environmental knowledge (cognitive learning). This was another key finding from Gill’s (2011a) review which found strong support for the claim that childhood experience of green environments is associated with greater environmental knowledge.

**A crisis of childhood?**

An alternative view is that the problem is a crisis of childhood. This discourse is promoted by those whose interest is the child in the present (appealing to parents, educationalists, and those with an interest in health and social care). The child is constructed as a social actor in their own right; one whose connections with nature are significant for their well-being here and now; a ‘being.’ This argument is based on Wilson’s (1984) concept of biophilia which argues that humans need contact with the natural environment to flourish. Indeed, a recent government white paper builds firmly on this idea in its reference to “nature’s health service” (DEFRA, 2011, p.46).

Interestingly Gill (2011a) found that out of all the claims made about the benefits of experiences of nature for children, the evidence was strongest with respect to the health benefits (both physical and mental). However, these benefits are clearly associated with regular contact with nearby nature in contrast to the irregular experiences of wild/pristine nature associated with pro-environmental attitudes and behaviour. As he explains “spending time in nearby nature leads to improvements in mental health and
emotional regulation both for specific groups of children (such as those with ADHD) and for children as a whole” (p.8). This tends to suggest that different types of experiences of nature may be associated with different benefits.

A conceptual resolution

In her exploration of constructions of children and childhood, Uprichard (2008) argues that the polarisation of the being and becoming child is ultimately unhelpful. Instead she proposes a resolution based on the understanding that “children and adults are always being and becoming…the onus of agency is present and future” (p.313). I want to argue that an extension of this resolution to these two discourses could be the most productive way to proceed. It is not a case of either or, but of both. Rather than being seen as competing perspectives, they are in fact mutually reinforcing. For the indicative evidence is if children are able to have regular, positive experiences of different types of natural environment, both they, and the natural environment, can benefit. As Kahn (2002) argues “childhood is a good place to start solving the problem” (p.113) whether ‘the problem’ is perceived to be environmental or one of well-being. It follows that an inter-disciplinary approach is required and that those with a primary interest in the environment need to come together with those whose starting point is the child. This
conceptual understanding offers a potentially new way forward but raises the question as to its relevance to higher education.

Children, nature and higher education

Evidently, it is not the business of an HEI to interact directly with children or to try to connect them with nature. However, many institutions do educate current and future educators and hence have an interest in the agenda from both a teaching and a research perspective. An even more compelling argument derives from what Scott et al (2012) describe as “a complex, interlocked and rapidly unfolding set of sustainability challenges underpinned by social, cultural, economic and environmental developments” (p.1). Connecting children and nature agenda can be seen as one such sustainability challenge. There is a growing mandate from government for HEIs to address these sustainability challenges within the curriculum and this is reflected in the new guidance on education for sustainable development developed by the Quality Assurance Agency in partnership with the Higher Education Academy (QAA, 2014). Higher education is seen to have a critical role in producing future leaders who are able to manage these complex challenges and to develop appropriate responses.

What follows is an example of how one university has responded to the connecting children and nature agenda by developing a collaborative partnership for change.
Through an exploration of the partnership development process, key lessons learnt will be highlighted and analysed within the context of relevant literature.

**One HEI’s response: the ‘Connecting Children and Nature Network’**

Drawing upon the conceptual understanding articulated earlier in this paper, the ‘Connecting Children and Nature Network’ was set up as an inter-disciplinary project. As Scott et al (2012) emphasise, such projects must seek to work “across disciplinary silos, divisions and organisational tribes to integrate the efforts of a wide variety of players” (p.5). In practice this meant that funding was sought from several different departments* and a small internal working group was set-up with wide representation from across the university to develop and manage the project. The initiative was positioned from the beginning as an engagement project. A number of key external partners were identified and invited to join a wider project steering group. The following aims were set for the project:

- To build on existing ‘children and nature’ related activity
- To offer opportunities to explore the agenda both theoretically and practically so as to promote both knowledge and experience
- To provide appropriate spaces for exploring, discussing and collaborating
- To develop a university-led Connecting Children and Nature Network
Two engagement events were planned and delivered; an evening expert lecture and discussion and an outdoor conference held at a local forest school site. Both events were marketed to all staff and students as well as via the networks of external stakeholders and were very well-attended. This was followed by an evaluation of the project for as Scott et al (2012) argue, “implementation does not unfold in a one-off linear fashion but through rising spirals of development, implementation, evaluation and improvement” (p.5). Basic data was collected from all participants (a purposive sample) including their current professional role. Unstructured anonymous written feedback was also requested from the fifty participants attending the outdoor conference. A total of thirty-five responses were returned representing a 70% response rate.

An inter-disciplinary initiative

Analysis showed that the events were successful in attracting a wide range of individuals and organisations from different disciplines and professions including staff and students, environmental and nature conservation organisations, early years settings and schools, Local Authorities and arts and cultural heritage organisations. This grouping was unique in character being inter-disciplinary and representing both dominant discourses (environmental crisis and crisis of childhood).
An emerging community of practice

Analysis also revealed the emergence of a ‘community of practice’ as defined by Wenger (1998).

A domain: Wenger (1998) argues that a community of practice has an identity defined by a shared domain of interest. Interestingly, in spite of the diverse backgrounds of participants there was a sense of shared values. As one respondent wrote “It reminds me that I’m not alone in thinking this way that outdoor education is good.” Another described it as a “network of like-minded people”

A community: A second characteristic of a community of practice is collaborative relationships. Wenger (1998) argues that members should engage in joint activities and discussions, help each other, and share information; they build relationships that enable them to learn from each other. The evidence from the feedback is that outdoor conference provided the time and space for participants to develop new relationships and for this sense of community to emerge. As one participant explained, “I’ve loved talking and meeting new people and sharing ideas.” There was also a strong expressed desire for these relationships to be sustained beyond the initial events – “I look forward to the next instalment!” “More conversations about ways forwards would be great”
**Practice:** The final distinguishing feature concerns practice. Wenger (1998) argues that members of a community of practice must develop a shared repertoire of resources: experiences, stories, tools, ways of addressing recurring problems—in short a shared practice. The eight participatory workshops offered as part of the conference were set up on just this basis; as a means of sharing practice. The responses from participants suggests that this was successful and that many felt inspired to develop and transform their practice no matter which professional background they came from as the following quotations attest; the first from an early years professional, the second a countryside manager:

“*From today I’m going to strive to increase my setting’s outdoor experiences so that those children can benefit from nature like I have done today*”

“I have lots to take away with me and use in the work place”

Within the context of its initial aims, this analysis suggests that the project has been successful and through engagement with a variety of stakeholders an emergent community of practice has developed.
Reflections: what has been learnt?

The process of building a network has been complex revealing competing perspectives and agendas. The conceptual approach has been a strength, bringing together participants from different backgrounds and encouraging interdisciplinary collaboration. However, it has also created a more challenging structure to develop and maintain. From the very beginning, tensions started to emerge. Interestingly, some of the most significant were not between those from different conceptual perspectives but from within a single perspective. Differences in terms of what is deemed ‘good practice’ led to initial dissent amongst forest school delivery organisations. Equally, there were tensions internally about ownership of the agenda and practical challenges about where it sits. Traditional academic structures do not make inter-disciplinary working easy nor is it necessarily valued as highly as conventional subject specific business. There are both conceptual and logistical barriers which must be overcome and this takes time, motivation and resource. As Scott et al (2012) argue, there is a need to “actively foster a culture of collaboration – in which teams involved in cross-faculty and inter-unit projects are supported, recognised and rewarded” (p.8).

The extensive connections the university has with both the education and environmental sectors have supported the development of the Network. However, the size and hierarchy of the institution is something which can be difficult to manage and negotiate with small external organisations. Things tend to take much longer to process and are
harder to track in a large and diverse institution which can cause frustration for partners and make it challenging to keep them on board. Equally, the business of a university is quantitatively different to that of partner organisations. As a Higher Educational Institution, the role is one critical engagement with, rather than tacit acceptance of, the ‘connecting children and nature’ agenda. This can again create challenges; maintaining a critical and analytical approach to the agenda is hard when surrounded by passionate enthusiasts. However, it is precisely because the participants are hugely committed that the Network has developed at all.

**Moving forward**

In spite of these challenges, a number of deep and productive relationships have been formed and new collaborative activity is being developed. There is a shared conviction that connecting children and nature matters and that more can be achieved in partnership than alone. There is widespread motivation from those involved to initiate a step-change and take the emergent community of practice to the next level and funding has been secured to maintain and develop the Network. Returning to a consideration of the core business of a HEI, it is clear that the potential of the Network lies in developing activity in research and knowledge exchange and teaching and learning as well as further engagement. The model below (Figure 1) was drawn up to both position the Network and to communicate this internally and externally.
Moreover the approach of building a targeted network across disciplinary silos, divisions and structures to bring together a wide variety of players is one which has been seen to have value beyond the project itself. Within the context of the University’s wider engagement with Education for Sustainable Development there is now interest in exploring how this partnership approach could be developed and extended in terms of other agendas. Whilst acknowledging the “complex and distinctive” (p.1) set of challenges facing higher education, Scott et al (2012) conclude “now is the time to act
in concert to take up the challenge and use higher education to build a better future” (p.18). The ‘Connecting Children and Nature Network’ is an example of how one HEI has taken up and responded to this challenge.

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