



Outdoor learning and psychological resilience: making today's students better prepared for tomorrow's world

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Introduction

One of the hallmarks of education is to build students' emotional, psychological and physical resilience (Booth 2015; Haggerty et al. 1996). However, all available indicators suggest what we are doing does not appear to be universally effective (Black Dog Institute 2016; Haidt and Paresky 2019). Rates of mental illness, anxiety, depression, and a myriad of other health issues such as ADHD, obesity and diabetes are rising (Gray 2018a, b; Henley 2010). These modern maladies are in part, linked with our inactive and nature-estranged lifestyles (Kellert and Wilson 1993; Maller and Townsend 2006; Selhub and Logan 2012). Correspondingly, Louv (2011) states that children are suffering from what is commonly referred to as Vitamin N (N for Nature) deficiency. Recent provocations by Braus and Milligan-Toffler (2018) and Truong and colleagues (Truong et al. 2018) carry this viewpoint to further magnitude.

A 'challenge by choice' philosophy provides one (of many) underlying justification for outdoor learning (Neill and Dias 2001). Advocates for this philosophical model have repeatedly argued that exposure to natural challenge activities can enhance participants' psychological resilience (Csikszentmihalyi and Csikszentmihalyi 1990; Dickson et al. 2008; Gray and Martin 2012). This paper showcases some of the contemporary research in resilience and discusses how outdoor learning is an appropriate platform for the development of coping strategies and psychological resilience

(ACARA 2017; Hayhurst et al. 2015; Hattie et al. 1997; Sibthorp et al. 2008; Taniguchi and Freeman 2004).

Exploring the concept of psychological resilience

We live and learn in a world which is punctuated with daily crises, uncertainties and challenges. Psychological resilience is the capacity for adaption in the face of tragedy, trauma, adversity, threats or significant stress (American Psychological Association 2010; Rutter 1987, 1993, 1996, 2006). Put simply, resilience is the ability to, "bounce back" from challenging experiences (Smith et al. 2008). Booth (2015) asserts psychological resilience is a dynamic capacity integral to how an individual manages stress, and more specifically, resilience is also a key attribute of psychological health. Based on this premise, educational interventions such as outdoor learning can theoretically and practically bolster, fortify and increase resilience (Nettles and Pleck 1996).

As a fundamental life skill, psychological resilience can be attributed to a myriad of personal attributes and outcomes (Bonanno 2004; Jew and Green 1998; Rutter 1993). Essentially, all definitions of resilience show an underlying commonality, albeit the capacity to cope with stress (Jew and Green 1998; Rutter 1996). However, it is important to note that psychological resilience differentiates itself from other forms of resilience (for instance physical resilience) as it relates to the ability to sustain, recover, or improve mental health (Booth 2015; Neill and Dias 2001).

Disturbingly, current Australian research from the Black Dog Institute (2016) revealed just under one in four (22.8%) of young aged adolescents (15–19 years) had a probable serious mental illness. Statistics such as these are cause for alarm,

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especially for the helping professionals such as counsellors, psychologists, teachers and social workers.

The Nexus of outdoor learning and psychological resilience

The development of psychological resilience is one of the most popularly claimed benefits of outdoor education and learning (Gray and Pigott 2018; Neill 2008). Carefully designed and sequenced outdoor activities can increase students' repertoire of coping strategies and resilience (Booth 2015; Ewert and Yoshino 2011; Neill and Dias 2001; Neill and Heubeck 1998; Shellman 2009; Skehill 2001). Furthermore, Sheard and Golby (2006) reported changes in hardiness, mental toughness, self-esteem, self-efficacy, and dispositional optimism as a direct consequence of outdoor adventurous activities.

According to a recent online article in *The Guardian* “if we overprotect children and keep them “safe” from unpleasant social situations and negative emotions, we deprive them of the challenges and opportunities for skill-building they need to grow strong” (Haidt and Paresky 2019). In many respects, contemporary society mollicoddles children so they emerge as a ‘bubble-wrapped generation’ (Malone 2007). This ‘nanny-state’ or hypervigilant parenting and educating approach suggests children have been cocooned in cotton wool and inevitably, risk averse (Gray and Pigott 2018). To this end, Haidt and Paresky (2019) contend “students now react with a kind of emotional allergic response (often referred to as being “triggered”) to things that previous generations would have either brushed off or argued against”.

Gray and Pigott (2018, p. 199) articulate children should be allowed “to take risks, nurture an adventurous spirit, and include embodied experiences involving the senses and emotions”. For educators developing a student's psychological resilience, the curriculum should offer tangible ways to foster self-regulation and self-control. By employing outdoor learning as a teaching medium, elements of risk taking, problem solving and inner-mastery emerge as by-products of engaging with natural environments. As a corollary, being in nature and exposed to the natural elements (which are largely unscripted), we witness how students “learn to dig deep and develop executive functioning skills” (Gray and Pigott 2018 p. 200). In a similar vein, Steinhardt and Dolbier (2008) advocate a reciprocal relationship between coping and resilience. Outdoor learning enhances resilience through controlled exposure to stressful experiences and development of appropriate coping responses.

Participating in expeditions and outdoor learning programs such as hiking, kayaking, rock climbing and mountain biking, involves elements of hardship, adversity and challenge. Inevitably, circumstances arise that bring on stress, inner challenge and difficulty. Yet according to Booth (2015), eustress and the stress inoculation model indicate there are many

benefits to this type of stress. Individuals gain skills and attributes they wouldn't have known they were capable of had they stayed in a mentally, emotionally, and physically safe and comfortable place. Invariably, one of these benefits is purported to be psychological resilience (Dickson et al. 2008) which helps make today's students better prepared for tomorrow's world. The nexus of outdoor learning and psychological resilience is simple and as Gray et al. (2017) attest, it is best to *get out of the way and let nature be the teacher*.

Nature and well-being

The therapeutic role of natural settings has been well documented as far back as classical Chinese and Greek civilizations (Kaplan and Kaplan, 1989; Townsend and Weerasuriya 2010). Our natural environments possess a restorative power; extant literature shows that outdoor settings ameliorate stress, improve mood, enhance coping ability and assist in combating depression (Gray et al. 2018; Neilson and Hansen 2007). The positive effect of nature has been labelled ‘*The Biophilic Hypothesis*’, a term coined by Harvard biologist Edward O. Wilson (1984, 2015) to describe an innate love of nature and an affiliation to all living things shaped by our species' evolutionary heritage.

In Victoria, we have seen the advent of ‘*Feel Blue: Touch Green*’, a mental health program using green spaces to address depression and mental illness (Townsend and Weerasuriya 2010). This initiative is based on the extant literature which reveals our separation from nature is implicated in declining physical, mental, social and spiritual wellbeing. We need to develop an affinity with nature whilst also promoting access to outdoor environments. Now more than ever, we should be ensuring that Australians get their daily recommended allowance of vitamin N for health, happiness and fulfilment.

Resilience and outdoor learning in the school curriculum

The notion of *where* and *when* indelible learning takes place can be highly contentious (Scott 2017). However, the Australian Curriculum, Assessment and Reporting Authority (ACARA 2017) recognised the importance of Outdoor Learning as a curriculum connection in 2017 (Gray 2018a, b). A broadened perspective on twenty-first Century education, which focuses on an interdisciplinary approach to teaching resilience provides the main thrust of this paper.

While formal school education is often framed as “indoor classroom learning”, it can be argued transformative learning takes place not only in the confines of the classroom, but also outside in the natural world (Dowdell et al. 2011; Gray and Pigott 2018; Ryan and Gray 1993; Scott 2017). For many

decades, outdoor practitioners and researchers have claimed that beyond the four walls of the classroom is often where real-life problem-solving occurs (Gray 1997, 2018a, b; Gray and Martin 2012; Kahn and Kellert 2002; Kahn and Kellert 2002; Kellert 1998, 2005).

ACARA's (2017) curriculum connection addition can be seen as key to developing psychological resilience. In the words of Gray and Pigott (2018, p. 195) "teaching in partnership with the natural world provided a compelling platform for transformational learning". Outdoor learning provides a fertile ground where students work—both individually and in teams—to set goals, to harness their inner strengths, to use self-determination, tenacity and personal goal setting to achieve desired outcomes (Hattie et al. 1997). Consider for instance, the teamwork, self-discipline, cooperation and collaboration that are built into outdoor adventure activities (Boyle 2003).

Innovative teachers explore ways in which interpersonal relationships, communication and empathy skills embedded into experiential outdoor learning. Without reservation, offers an effective mechanism for fostering psychological resilience. Additionally, the social capital developed whilst navigating challenging learning environments can become a life-long personal attribute (Gray 2017). Clearly our educational challenge is how to create these wide-ranging opportunities and how to value these outdoor activities as legitimate experiences for students to learn that are equally worthy of a school and its teachers' investment. This begs the question: *If outdoor learning is just as important as what goes on in class, how do we carefully design, implement and track this learning for every student?*

Encouraging teachers to embrace outdoor learning and risk taking

Educators worldwide now recognise the importance of human-nature connection as a determinant of children's psychological health and wellbeing (Braus and Milligan-Toffler 2018; Davies 1996). Scandinavian educators have long acknowledged the role of outdoor immersive activities for their students to augment healthy maturation and psychological development. Students spend approximately three hours each school day outside – rain, hail, snow or shine – in all four seasons. Despite a climate that would seem to discourage outdoor learning activities, pedagogues argue there is no excuse for children staying indoors; one Swedish educator remarked during a recent visit:

'Our mantra is there is no such thing as bad weather, only bad clothing.'

Why do Australian's have a growing aversion to taking kids outdoors, especially when we enjoy a relatively mild climate with an endless landscape of possibilities? Perhaps

teachers feel shackled by endless layers of risk management paperwork? Or conversely, the overcrowded curriculum allows no place for unorthodox methods? However, "teachers must be trusted with responsibility for reflecting on and adjusting professional practice in the light of research evidence and their and other practitioners' knowledge and experience" (Ewing 2018, p. 32). Proponents of outdoor learning need to champion this transformative learning vehicle so we can confidently articulate the benefits and affordances (Gray and Perusco 1993; Lloyd et al. 2018). More specifically, we should monitor and evaluate outdoor learning just as we do with traditional studies of literacy and numeracy.

Some caveats are needed: the author is not advocating for children to be thrown head-first into unstructured, outdoor learning in wild spaces. Of course, we want to keep children safe. But exposure to normal stresses and strains are vital and necessary for their future wellbeing. More importantly, teacher training institutions should foster pathways to upskill pre-service teachers in these capabilities.

Finally, a veteran teacher (who is also the author's friend, professional colleague and co-hiker) recently remarked upon the lessons learnt in, through and about Nature:

"The insights gained from my own experiences as an experienced HPE teacher who experienced a 4-day intensive hiking activity in Columbia as well as an adventurous cliff climb in Peru. The personal gains encompass a galvanising of inner resources to meet sometimes overwhelming obstacles. The positive self-talk which comes from deep within to generate physical and mental strength to meet the challenges faced. It is ultimately a development of self-confidence and self-actualisation that becomes a building of self-worth and self-belief."

Conclusion

The Point and Counterpoint on Outdoor Learning in *Curriculum Perspectives* provides a global overview of what curriculum change-makers are doing to inspire, critique, stimulate, appraise, and guide their work. The collection of papers in this edition examines key factors influencing global trends and critiques issues arising from what is being undertaken at the coalface.

The opening paper from researchers in the United Kingdom, Denmark, Australia and Singapore, entitled *Integrating outdoor learning into the curriculum: an exploration in four nations* joins four very different nations to examine trends within their own countries, and more broadly, to ideas of policy commonalities and differences across the globe. The idea of 'flow' is adopted by Rowena Passy, Peter Bentsen, Tonia Gray and Susanna Ho to help illustrate their

argument. International researchers Mark Leather and Kass Gibson also from the UK, interrogate the concept of hyperreality and how it facilitates an understanding of consumerism in contemporary social life. In essence, their paper ‘*The consumption and hyperreality of nature: Greater affordances for Outdoor Learning*’ posits that representation and experience cannot be simply disentangled.

The third paper by Swede Jonas Mikael, *Becoming-place: a rhizomatic exploration of friluftsliv in the Swedish school curriculum*, is a response to the philosophical ‘drivers’ shaping our epistemological understandings of outdoor learning and offers a place-responsive pedagogy. In concert, Australian educators Katherine Bates, Matt Teudt and Jess Collier’s paper entitled *Mapping Points for a Place-based Pedagogy of Practice* eloquently discusses how building connectedness with place not only benefits an individual’s sense of self, but also with others.

The final two papers are also written from Australian perspectives, yet their influential insights have global application. Nicole Taylor, Jan Wright and Gabrielle O’Flynn’s paper, *An Absence Of ‘The Environment’ In HPE Teachers’ Meanings of Health* examines the non-existence of ‘the environment’ by teachers within the health space. Interestingly, they highlight how many HPE teachers feel that environmental health should be considered a priority in HPE schooling. Lastly, Thị Hồng Nhung Nguyễn’s paper *Parental involvement in outdoor learning: crossing curriculum priorities* interrogates notions of “global perspectives” in outdoor learning and questions why English-only, Western-centric standpoints typically inform our curriculum.

In closing, as a secondary and tertiary outdoor educator for over 35 years I hope the papers in this Point and Counterpoint’s focus on Outdoor Learning, not only extend the emphasis of the papers on ‘learning for, with, and about the natural environment’ published in this section in the September 2018 edition of *Curriculum Perspectives*, but also, that they clarify mainstream educators’ understandings of why children’s connection to nature is now, more than ever, important. The outdoor learning profession looks forward to initiating, activating, sharing, driving, and expanding future research to progress the field.

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