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## **Environmentalization of the physical education curriculum in Brazilian universities: culturally comparative lessons from critical outdoor education in Australia**

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‘Environmentalizing’ curriculum in Brazil is a worthy goal of global educational reform for sustainability but is challenging given the limits to rational change thesis already argued in critical social science and post-structural deconstructionism. The federal government mandate to environmentalize undergraduate physical education programs poses the question of which aspects of physical education are conducive to change. ‘Nature’ sports, or outdoor/adventure activity education, is the most likely candidate. In Australia over the past three decades, the environmentalization of ‘old’ physical education outdoor activities has led to the development of ‘new’ discourse practices that integrate environmental studies and outdoor education and are designed for ecological responsibility and social sustainability. In this culturally comparative light about the possibilities for curriculum change in environmental, outdoor and physical education, we examine the potential for change in Brazilian approaches to physical and sport education by critiquing broader ‘environmentalizing’ issues as they have occurred historically within the Australian outdoor education context in the university and secondary schooling sectors.

**Keywords:** outdoor education; environment; higher education; curriculum reform

### **Framing: problems, concepts and contexts**

Efforts are gaining momentum in Brazil to ‘environmentalize’<sup>1</sup> the physical education curriculum in pre-service teacher education in the university sector (Rodrigues, 2012, 2013). In this process, there is a range of conceptual opportunities and practical possibilities to critically reconstruct certain aspects of physical education that are most amenable to environmentally centered discourses and focused nature–culture experiences. Those that stand out most prominently are nature sports, outdoor activities and outdoor recreation. Precedents for this environmental reform of traditional perspectives and approaches to physical education and sport studies can be found in other parts of the world; lessons should therefore be learned if educational reform is to be ‘critical,’ ‘non-idealistic,’ ‘practical’ and ‘useful,’ and not a token, sloganeering or, indeed, an example of ‘greenwashing.’

In Australia, this shift to an ecologically responsible and socially sustainable version of education has partially occurred in the higher and senior secondary education sectors over the past 30 years via the rise in the physical education curriculum domain of the alternative sub-field of ‘outdoor education’ (Payne, 1989, 2001, 2005). It includes a range

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of 'core' physically adventurous or risky and challenging activities that occur in the remote or wild 'outdoors' over a number of days, typically in the 'wilderness' or national parks. Many Brazilians refer to this as 'nature sports.' Using a culturally comparative method, our aim here is to highlight some of the critical lessons that can be learned in the current undergraduate reform efforts in physical education and sports curriculum in Brazil. Our use of the term 'critical' (Payne & Rodrigues, 2012) is indebted to how it theoretically and practically has been developed in neo and post-Marxist critical and post-critical approaches to environmental education<sup>2</sup> in the Anglo-speaking north and in critical outdoor education specifically within the Australian cultural context (Payne, 2005). There are strong resonances in the way we use the term critical with that of Freirean thought well established in the Brazilian context.

The task of reconceptualizing mainstream or traditional physical education is a formidable challenge in both Brazil and Australia, irrespective of different cultural characteristics, national histories and related geo-epistemologies (Canaparo, 2009), let alone environmentalizing it as part of a global reform. Indeed, any educational reform efforts must be treated as problematic given the limits to rational change thesis that has been well articulated in critical social science and post-structural deconstructionism (e.g., Fay, 1987). Put simply, there are numerous limits and limitations on the individual and collective rationalities often presupposed by change agents in efforts to critically reform education policy. The conservative 'power' of tradition and orthodox 'force' of institutional, organizational and bureaucratic disciplinary arrangements and entrenched 'habits of mind' are, increasingly, complicated and perplexed by the magnitude and messiness of the globalization of education policy, curriculum and pedagogical research and practices (Payne & Rodrigues, 2012). The economic power and technologically driven 'neo-liberalization' of the concept of education and its policies and practices cannot be underestimated, with parallels to be found in the conversion of physical activity, recreation and sport as parts of the entertainment, leisure and health industries. Over-zealous approaches to curriculum renewal, as well as a normative lag in methodological innovation in critical approaches to inquiry in fields such as physical education, outdoor education and environmental education, are indeed highly vulnerable to such forces and, inevitably, are epistemologically limited and ontologically constrained if power in traditional approaches to those curricula is not also engaged critically. This is particularly true in efforts to environmentalize the curriculum. We therefore highlight the need for carefully considered efforts to create in various educational practices the possibility of a more socio-ecologically sustainable future (Payne, 1999).

In using a culturally comparative method to highlight certain limiting factors, we identify how certain historical trends and issues in the related curriculum field of environmental education in the West/North and in Australia shaped the emergence of the physical education sub-field of 'outdoor education' in the state of Victoria in Australia over the past three decades. This old or traditional 'physical activities in the outdoors' drive (such as bushwalking, kayaking, climbing, skiing, expeditioning) aimed from the early 1980s to 'break away' from 'physical education' that historically and culturally had privileged the exercise science, skill development, sometimes 'military-like' and drill-based, and coaching or instructor approaches to physical and sport education that dominated up to the 1970s. That 'culture of physical education and sport education' persists now as a university and secondary education tradition and curriculum/pedagogical standard. In the 1980s Outdoor Education made tentative claims on being 'alternative,' but those 'old' adventure/challenge/risk activities have been 'sustained' as the physical 'core' of 'experiential learning' for the purposes of 'personal and social development and

character training' consistent with their post-World War I 'survival' origins for 'rugged individualism' in education inspired by Kurt Hahn, Baden Powell and others, and elite private school camping programs in England and Australia. Importantly, while challenging questions in the discourse of outdoor education have been raised about the purposes and pedagogical means of character-building 'educated' for in the outdoors (Brookes, 2004), we pose much deeper questions about the relevance and value of highly consumptive outdoor/adventure practices to any notion and practice of 'environmentalized' physical education and outdoor environmental education. In fact, there is mounting insight and evidence that the 'old' activities are not an educational and experiential solution to the still elusive quest for ecological responsibility and social sustainability, as they are ecopedagogically 'designed' and developed in equitable, inclusive and just ways.

To develop insights into current reform efforts in physical and sport education in Brazilian universities, we critically 'case' examine one (r)evolutionary aspect of the discourse practices of physical education and outdoor education in Australia. We identify the rise of an 'identity crisis' in contemporary outdoor environmental education due largely to a still unresolved and ongoing debate within a 30-year 'tension' between the 'traditional' practical 'adventure' focus in remote and exotic outdoors and the critically 'progressive' alternatives that 'responsibly' prioritize 'just' and inclusive movement experiences and environmental studies in various environments, versions of nature and our bodied/corporeal and symbolic relations with such environments/natures (e.g., Lugg, 2004; Nakagawa & Payne, 2014; Newbery, 2012; Payne, 1994, 2005, 2014; Payne & Wattachow, 2009). In so doing, we clarify, within limits, how the discourse practices that encircle the concepts of 'environment'/'environmental' are influenced or can be transformed by the particular references, structures and dynamics that shape Brazilian physical education and Australian outdoor education programs.

### **Environmentalization of physical education in Brazilian higher education settings**

One important strategy that promotes environmental education as a relatively autonomous sphere of cultural production is its growing uncritical institutionalization. Since the 1990s, debates in Brazil on the reconfiguration of educational policies have addressed more emphatically the institutionalization of environmental education within the Brazilian educational system, resulting in letters of appointment and official declarations and recommendations. The higher education sector figures prominently.

In 1998 the Brazilian Ministry of Education published the 'National Curriculum Parameters' that promoted five 'transversal themes.' 'Environment' was one of them (Brasil, 1998a). One year later the 'National Environmental Education Policy' (Brasil, 1999) was established, conceiving environmental education as an integrated, continuous and permanent educative practice that should be present in all levels of education. Attempting to give visibility to the National Environmental Education Policy in curricular practices and policies, the 'National Curriculum Guidelines for Environmental Education' (Brasil, n.d.) were also promoted, including legal requirements and providing principles and operational guidelines for environmental education's transversal integration at different levels and forms of education. The document refers to higher education specifically orienting towards the inclusion of the 'environmental dimension' in all undergraduate teacher-training programs, be it through specific disciplines or interdisciplinary projects, adding content and strengthening relations with different areas of knowledge aiming at the formation of teachers that recognize their social role by positioning themselves critically, ethically and politically (Brasil, n.d.).

To further enrich the debate a relevant set of recent research focuses on the environmentalization of curricula in different academic programs/disciplines in Brazilian higher education institutions (Ferraro Júnior, 2004; Freitas & Souza, 2012; Pavesi, 2007; Rodrigues, 2013; Rosalem & Barolli, 2010; Verdi & Pereira, 2006; Zuin, Farias, & Freitas, 2009). This research (broadly) shows that, despite the academic call for the preservation of the transversal character of environmental education in the curriculum, this desired ‘transversality’ is still quite distant from the reality of teacher training programs in higher education settings in Brazil. This is also evidenced by the Brazilian Organization for Management of National Environmental Education Policies (Órgão Gestor da Política Nacional de Educação Ambiental, 2007) when mapping environmental education in Brazilian higher education institutions.

The lack of a consolidated critical–philosophical epistemological identity of the (global) environmental field and the idea of transversality/multidisciplinarity in Brazil undoubtedly create problems for traditional disciplinary approaches to curriculum, such as physical education. In general, what is suggested or recommended is that environmental education should be present in every academic discipline. But the more common result of this (forced) insertion is a sort of ‘non-place’ for environmental education in its integration or infusion into traditional disciplinary approaches to curriculum. In other words, the complexity of a transverse process of construction of knowledge (and all the idealisms that come with it) put together with a fragile epistemological foundation and a fiercely fought-over ‘place’ in the curriculum can transform a process that might or should occur in every academic discipline into a process that does not occur properly in any. This is also an opening for discourses that, in their effort to become modern by incorporating the emerging environmental dimension, end up (re)producing uncritical jargons and practices (greenwashing) that serve only to perpetuate the *status quo*, one of the main pitfalls or threats of environmentalization that attempts to be critical and praxical, at the same time.

If the logics, dynamics and internal processes of curricular environmentalization were not already hard enough, the enduring fact is that ‘traditional’ physical education—conceived in Brazil, like Australia, as a combination of sports and exercise sciences—is an unlikely candidate for environmentalization. Furthermore, physical education has blossomed into a broad and diverse vocational field and this has historically led to two main tendencies in higher education teacher-formation settings: on the one hand, fragmented over ‘specialized’ undergraduate programs (such as a specific ‘licensing’ degree for future school teachers and a ‘bachelor’ degree for performance training and coaching) that aim to attend to the expansion of its professional field; on the other, generalized unified programs (such as ‘full licensing’ degrees that aim to ‘fit’ all physical education-related issues into one curriculum) that have a difficult time in satisfying this expansion of specializations (Borges, 2001). This paradox means that proposals of curricular environmentalization in physical education programs generally have to deal with either the problem of a fiercely competitive or a ‘soft’ over-generalized curriculum. In the next section of this paper we shall describe how this dilemma is, at least in part, responsible for an ‘identity crisis’ in Australian outdoor education, a scenario that may help Brazilian scholars to (re)think ongoing strategies of curricular environmentalization in physical education.

Nonetheless, environmental education does figure amongst the ‘official’ documents of the area. Article 7 of the ‘Physical Education Curriculum Guidelines’ (Brasil, 2004) emphasizes the responsibility of higher education institutions towards the curricular organization of undergraduate programs in physical education. It institutes in its fourth paragraph that issues concerning environmental education (amongst others) should be addressed within the sets of knowledge contemplated by the physical education degree.

This is also a growing or 'attractive' idea amongst Brazilian physical education researchers (see Rodrigues, 2012, 2014) who understand that human movement, or the corporeal engagement of humans in the world, is a major element of the set of knowledge pertaining to the physical education field and that environmental education cannot be excluded from the overall notion of a 'culture of movement.' However, despite the existence of a National Policy for Environmental Education reinforced by National Curriculum Parameters and by specific Curriculum Guidelines for Physical Education, teacher training programs in physical education, in general, do not seem to consistently/significantly address theoretical or methodological facets of environmental education in institutionalized forms of curriculum in Brazil (Leite & Caetano, 2004; Silva, Silva, & Inácio, 2008).

This claim is supported by PhD research published by Rodrigues in 2013. The author analyzed official curricula of physical education programs in Federal Universities of Brazil, as well as papers published in scientific journals regarding the synergies between the physical education field and the environmental field in Brazil over the last decades. According to this study, of the 44 existing physical education programs within Federal Universities of Brazil, only 15 have academic units that in some way approach issues related to the environmental dimension (not always associated with environmental education). The analysis also shows a great range of different objectives, contents and methodologies in approaching the issue, both in the official curricula and the few published academic papers.

Nonetheless, official government mandates do exist, leading us to think about what purposes these mandates really serve (words such as 'greenwashing' and 'politics of unsustainability' [Bluhdorn, 2011] come to mind, especially considering how the rise of neo-liberal forms of governmentality increasingly found in the performatively driven neo-corporate university may present a major risk or potential barrier to critical efforts to environmentalize the curriculum). The subject of 'nature' is approached with greater emphasis on the National Curriculum Parameters for physical education in the third and fourth cycles of primary education (Brasil, 1998b); specifically in the section that addresses 'transversal themes,' which includes 'the environment.' The discussion is centered on 'corporeal' outdoor activities, especially in 'natural environments.' According to the document, these activities include 'extreme sports' (surfing, mountain climbing, BMX and jet-skiing are mentioned), ecological leisure (hiking, snorkeling and caving are mentioned) or the use of locations in or near school areas (such as parks, squares and beaches) which allow discussions about the adequacy of these spaces for sustainable practices associated with a 'corporeal culture' (Brasil, 1998b).

Similar to what is generally found in Brazilian scientific literature on the insertion of environmental education in physical education (Rodrigues, 2013), the document highlights the importance of 'activities in nature' (generally characterized in the international literature, like in Australia, as 'outdoor activities'), linking these activities to what are probably the two major areas associated with physical education in Brazil: sport and leisure. Putting together this overview of the official government document and the findings of the aforementioned PhD research by Rodrigues (2013), it seems quite clear that outdoor (in nature) sport/leisure activity-oriented approaches towards environmental education are the most common regarding the environmentalization of physical education in Brazil. This 'future' is of interest and concern to the 'critical' approach that has only been adopted partially in Australia due to the 'limiting' factors outlined in the introduction.

These very revealing data contrast with another significant finding from a series of studies conducted in Brazil aiming to understand the motivations that lead individuals to participate in outdoor activities and the understanding these individuals have of the activities in which they are participating (e.g., Bahia & Sampaio, 2007; Cardoso, Silva, & Felipe, 2006; Tahara, Filho, & Schwartz, 2006): in general, the motivations and understandings presented by the participants can be coupled with concepts mainly related to preservationist approaches, to the ‘sportivization’ (Rodrigues & Gonçalves Junior, 2009) of everyday life or to dominant paradigms of aesthetics and fashion largely propagated by mass media. Altogether these concepts contrast directly with the main pillars of critical environmental education. This says something quite important about the ongoing processes of environmentalization of physical education in Brazil—if there is a critical potential in the insertion of emerging environmental discourses in traditional physical education activities, this seems to be getting lost amongst well-consolidated historical (conservative) paradigms within sport and leisure, as well as the power of the neo-liberalization imperative in most ‘everyday’ aspects of Brazilian and Australian ‘lifestyles,’ including university education.

Overall, the previously mentioned characteristic ‘non-place’ of environmental education appears to be present in the overall scenario of Brazilian undergraduate physical education programs. Despite growing interest in the subject in recent years, resulting in an interesting diversity of approaches and proposals for the insertion of environmental education in these programs, these appear scattered in different texts, including a few isolated papers in academic journals and occasionally undergraduate final assignments and master’s or PhD dissertations. Similarities are sometimes found, but what is commonly seen is a diversity of proposals, some quite contradictory.

Documents that bring together the main characteristics of these proposals are significant in the creation of benchmarks for geo-culturally/historically grounded dialogues, especially those that highlight similarities and contradictions between existing discourses regarding the environmentalization of physical education. The significance of such efforts lies equally on the potential incorporation of local/regional/national/global facets of critical environmental discourses by the physical education field in Brazil and on potential contributions from the Brazilian physical education field in (re)constructing concepts that define global discourses surrounding the environmental dimension.

In this section of the paper we have seen some ‘invitations’/inspirations from ongoing processes of environmentalization in Brazilian physical education to careful consideration/deliberation of how a ‘critical’ (reconstructive) approach can be developed—problems, pitfalls, issues, challenges in relation to justice promotion and not ‘reproducing/reconstituting’ injustices. Considering how critical dialogues with other similar ‘histories’ may offer interesting contrasts, the following section will be dedicated to one particular and significant example of how these issues evolved over the last 30 years in Australian outdoor education.

### **Critical outdoor education in Australia: an identity crisis**

Despite some gains over the past 30 years of critical curriculum reform effort, the transformative environmentalizing of physical education in Australia remains a formidable challenge for curriculum policy-makers in higher education settings in general, and for teacher education curriculum developers at both the university (teacher education) and state (primary and secondary schooling) levels. The modest gains so far made are the result of a long and difficult struggle, and continue to be jeopardized by traditional if not

hegemonic views of ‘outdoor education’ typically practiced primarily as adventure leadership and learning facilitation in the outdoors. Sometimes, aspects of environmental studies are ‘added on’ so as to legitimize the notion of outdoor education (Lugg, 2004; Payne, 2005). At the same time as (limited) progress is being made, a deeper analysis of what has become popularized in Australia as ‘outdoor environmental education’ is suggestive of a curriculum ‘identity crisis’—and its legitimization in schooling that also has implications for pre-service teacher education in the university sector (Payne, 2001).

Within the official historical academic discourse of outdoor education in Australia, promulgated lately through the *Australian Journal of Outdoor Education*, there has been a concerted effort over the past 30 years to ‘separate’ or ‘distance’ and ‘reposition’ outdoor education ‘away’ from physical education by locating it as a subset only of environmental education and studies (Payne, 1983, 2001). This ‘critical’ move in environmentalizing the curriculum can be found in both the schooling and university pre-service teacher education sectors, notwithstanding significant curriculum variations between the six states and two territories in Australia. Variations at the state curriculum level are due to geographical and climate differences that occur in various socio-cultural–ecological bioregions in Australia. We focus on the state of Victoria where the ‘bolder’ developments aiming at curriculum reform for sustainability are more in evidence.

At one practical level of educational reform in Victoria, this three-decade move to environmentalize the physical education curriculum via the critical development of outdoor education that incorporated socially critical perspectives of environmental education ‘for’ the environment, as well as ‘in,’ ‘with’ and ‘about’ it, has been successful—conceptually and practically in education policy formulation, implementation and enactment, leading to the accreditation in 1990 of the Victorian Certificate of Education (VCE) ‘Human Development—Outdoor Education Study Design.’ The VCE occurs in the last two years of post-compulsory education (Years 11 and 12) and the Outdoor Education Study Design was included in the first ‘roll out’ of the VCE in 1990.

Historically, the legitimization of the VCE Outdoor and Environmental Studies at the state level of curriculum policy is indebted to the development in 1983 of the first-ever degree program in Australia specializing in outdoor education. This three-year undergraduate qualification framed the emerging field of outdoor education as a subset only of a broader environmental education (Payne, 1983) rather than as a continuing component of physical, sport or leisure educations, notwithstanding this degree having its programmatic ‘home’ in the then Department of Physical Education at La Trobe University. This successful innovation in a pre-service teacher education faculty led to the formal invitation to Payne in 1988 from the Victorian State Ministry of Education to develop ‘Outdoor Education’ as part of its ‘Human Development’ Field of Study Curriculum (alongside Physical, Health and Home Economics Educations) in line with the state’s broader policies for social, economic and conservation justices. For the first time, Outdoor Education potentially was to be included as a separate area of study in the new VCE.

The unique three-year Bachelor of Arts (Outdoor Education) program built selectively on some of the past achievements and aspirations or expectations of ‘old’ outdoor education, including ‘outdoor pursuits’ (or nature sports), but drew strong inspiration from the ‘experiential education’ imperatives of John Dewey and the ‘land ethic’ of Aldo Leopold. Notwithstanding those still highly influential North American contributions to the framing of the degree program, its specialist focus aimed to develop a distinctively Australian theory and practice of outdoor environmental education. As well as undertaking extensive ‘field work’ in some of the traditional ‘outdoor/adventure pursuits’ such as bushwalking, flat-water canoeing and white-water kayaking, cross-country skiing,



open-sea snorkeling and rock climbing, undergraduate students were able to undertake major, sub-major or minor study sequences in human geography, ecology, biology, geology, social and cultural anthropology, natural history and environmental interpretation and even philosophy, sociology or accounting. Students were also required to undertake a major 'liberal education' three-year academic sequence in the sociology, history, social psychology, philosophy, ethics-politics and principles of education, nature/environment, outdoor recreation and environmentalism that practically was mirrored in 120 days of experiential learning (Payne, 1984). Put sharply, following Dewey's conception of 'experiential education,' there was a very strong academic program informing, reflecting and developing the experiential learning in the 'field.' At that watershed time for outdoor environmental education in the 1980s, three other one-year postgraduate diploma teacher education awards in outdoor education existed. Each had different emphases but all included some minor form of environmental science study. Only one existed in Victoria, at what is now Monash University.

The 1980s therefore marked a turning point in the historical legitimation of an environmentalized approach to experiential, outdoor, physical and health education curriculum development in the university and secondary school sectors, a legitimation effort that was highly 'political' and contentious. There was strong resistance from those secondary school teachers of outdoor education and camping programs committed to the traditional adventure activity focus with its core 'activity' and 'safety' driven 'legal' demand for qualified and experienced outdoor 'instructors' and 'leaders' capable of safely managing groups in remote settings, often wilderness or national parks, in potentially 'dangerous' environmental/weather conditions. This costly (e.g. equipment, travel, staffing, timetabling) approach to 'expert' outdoor skills 'authority' and privileging of safety 'credibility' for risk-management purposes of minimizing legal liability effectively reconstitutes the ongoing identity crisis and tension between old consumptive/consumer physical activity in the outdoors and new 'movement in nature experiences.' This crisis highlights the fundamental differences between a critically progressive form of (outdoor) education committed to social and ecological justices and the practically traditional or vocational view of outdoor 'education' as a form of training for outdoor recreation skills and leisure industry development, including nature and ecotourism.

For the purposes here, however, in terms of the 'praxis' (in schooling) of this university-led educational/curriculum reform effort in environmentalizing physical and outdoor education, for this major progressive turning point to occur, pre-1988 proposals to include 'old' Outdoor Education in the VCE failed because earlier efforts only reproduced the prioritization of the traditional limited core of physically adventurous/risk activities. They were seen as educational 'ends' rather than pedagogical means to broader educational purposes consistent with the notion of 'Human Development' in the VCE curriculum. Proponents of the 'old' misunderstood, ignored or denied the equity, social justice and conservation principles demanded by the Victorian State Government in its educational reform policies. In so doing, the 'old' tradition, albeit highly selective, perpetuated the (over)emphasis on a very limited range of male-dominated outdoor activities. Serious questions were raised pre 1988 by key VCE bureaucrats about the academic, conceptual development and theoretical merit (or lack of) of a traditional activity-based and skill-focused curriculum (Payne, 2001).

By 1990, despite the inherent 'conservativeness' of the traditional 'old,' outdoor environmental education as a hybrid of physical, outdoor, environmental and even health educations, in transition, was an emerging field of innovative academic, educational, experiential and equity/social justice development. Significantly, while building in a

cross-disciplinary manner upon the commonly developed notion of human development, the formulation of the specific VCE Outdoor Education curriculum document and its assertive, environmentally focused 'design' for teaching, learning and 'experiences' (rather than activities) was strongly delineated from the three other human development curricula, further consolidating a fundamental 'distinction' and 'distance' between outdoor education, as a socio-ecological form of environmentalized curriculum, and physical education.

Prior to the successful acceptance of Outdoor Education in VCE in 1988, outdoor education in secondary schooling was largely an informal 'extra' offered by enthusiastic teachers and often took the form of outdoor recreation and camping experiences on weekends. Its practices were somewhat romantically seen by its supporters as an 'alternative' (Bewsher et al., 1981). But, essentially, this notion of alternative was viewed as an outdoor and experiential alternative to indoor or classroom 'vicarious' learning, not a critical and progressive environmentalization of that traditional approach whose roots still lay squarely in prioritizing core 'outdoor pursuits' and the 'character building' legacies and 'rugged individualism' imperatives of the scouting movement, Outward Bound, private schooling and quasi-militaristic 'roots.'

Driven largely by the innovation at La Trobe University in 1983, the inclusion of Outdoor Education as a 'Study Design' accepted into the original VCE planning in 1988 also legitimized its radically 'alternative' educational status as a far more critically progressive, less romantic 'place' in the senior secondary school curriculum, at least in Victoria. This environmentalizing of the new VCE identity of Outdoor Education retained but opened up the range and scope of experiential activities in the outdoors to include a much wider range of movement experiences in 'nature.' The skilled performative 'ends' of old outdoor pursuit instruction which historically dominated for many traditionalists were partially diluted in this curriculum reform effort consistent with a broader notion of sustainability achieved through combining social and ecological justices in the VCE.

Significantly, these 'critical' reforms entailed a policy shift from traditionally patriarchal conceptions and constructions, as well as practices of what had been reified as 'outdoor education' (Cook, 1999). This encouraged a shift, at least at the curriculum policy level, from outdoor/adventure pursuit activities to the provision of more inclusive and equitable and just 'outdoor experiences' in the curriculum. 'All' potential VCE outdoor education students were to be guaranteed equal access into, and participation during, the curriculum/pedagogy over the four by one semester-long units, irrespective of their geographical living circumstances, as well as social, cultural, economic and linguistic backgrounds and differences, physical capacities and capabilities, gender and class issues. The historical evolution of outdoor environmental studies in the VCE, with fundamental implications and consequences for major reform at the pre-service teacher education level (as well as in-service professional development), is therefore highly intriguing for the curriculum historian and theorist in terms of how different versions of curricular environmentalization have occurred 'practically' in the relatively short policy-time-space 'reimagining' period of 20 years.

More specifically, these shifts require brief elaboration for pedagogical critique and development purposes. The 'original' outdoor education developed in the VCE in 1988 focused on a combination of (eco)phenomenological-type experiences which emphasized perceptual and sensory commitments 'in,' 'with' and 'for' nature, heavily incorporating considerations of the critical movement for social equity and justice. Experiences of bird watching, rock pooling, outdoor art and so on were now available to the innovative outdoor educator. At a later time, however, especially in the mid-1990s, the environmental sciences were more emphatically included in subsequent revisions of the VCE Outdoor

Education under a newly elected Conservative State Government. Not coincidentally, the same ‘re-scientization’ of the curriculum occurred in the VCE Physical and Health Education curriculum, again contributing to various ‘identity’ issues with the ‘applied science’ view of education (re)claiming authority from the mid-1990s. Critical environmental educators (and physical, health educators) have been highly critical of the renewed excessive authority of ‘science’ in those curriculum fields. Most recently, the curriculum guides for the 2012 version of Outdoor and Environmental Studies in VCE show that the current direction of the program now includes a stronger social and cultural focus on issues and concepts of environmental ‘sustainability’ (Gough, 2007), noting the ongoing tension between environmental education and education for sustainability (see note 2). Ironically, these difficulties were anticipated in the original VCE Outdoor Education Study Design first formally published by the Ministry of Education, Victoria, in 1990.

### Deeper critique and commitment

There have been progress and regress in environmentalizing old physical education and outdoor education in Australia in the university and secondary education sectors that cannot be disconnected, as we have noted. At a deeper level of historical analysis and critique, these uneven but inevitably worthy educational and curriculum reforms of the 1980s and 1990s, but again in the 2000s in the university/teacher education sector, have had to confront the ‘authority’ of the traditionally masculinist and classist adventurous and performatively driven discourse practice of ‘outdoor education’ that, effectively, reconstitutes the ‘identity crisis’ of outdoor education and acts as a limit on the rationality of change, following Fay, for example.

A deeper ideological critique is demanded. This struggle for legitimacy of the field of Outdoor Education occurs both discursively/textually in academic journals and practically in the field on a wide range of fronts that so far have not been mentioned; for example, the more recent ‘outsourcing’ of outdoor education to commercial providers who have strong understandings of risk management in adventure activities but far less or little understanding of the academic and educative purposes, nature and scope of outdoor education, environmental education and experiential education. Liability ‘worries’ due to the persistent emphasis in activities on adventure and risk, still mostly in remote locations, are now significant—hence the new ‘commodification’ problem of outsourcing to commercial and, inevitably, costly ‘providers.’ Put sharply (and metaphorically), outdoor adventure leadership and training operating under the guise of outdoor education only risks its own survival in an increasingly litigious user-pays neo-liberal colonization of (environmental/experiential) ‘education.’

The most recent conversations of a critical type in the dedicated *Australian Journal of Outdoor Education* have partially been inspired by the earlier three-decade efforts to environmentalize the curriculum reform. Effectively, lessons learned from the significant gains achieved in environmentalizing the curriculum during the 1980s and 1990s have persisted, but sporadically, noting the future of this journal is uncertain and serious academic debate might be at risk. Increasingly, however, contemporary critiques of the ‘old’ in Australia are written by female academics, but only occasionally by males (Brookes, 2004; Gough, 2007; Lugg, 2004; Preston, 2004).

There is the related ‘meta’ concern that published research in outdoor education which constitutes ‘knowledge’ of and in, or for, the field it serves is modest in nature, design, scope and rigor and has been unable to empirically demonstrate the value and efficacy of the various educational claims it too often rhetorically and uncritically makes within that

discourse practice. Because this contribution is ‘critical’ on both normative (ethico-political) and reflexive (epistemological–methodological) ‘grounds,’ three explanations are now offered to deepen this historical analysis, elaboration and critique of the current identity crisis of the field as a lesson to be learned from Australia, at least. These three interrelated lessons require elaboration because they, by and large, problematize the critical quest in Australia (and, undoubtedly, other parts of the globe, including Brazil) for social and ecological justices in outdoor education as an environmentalized and sustainable form of ‘border crossing’ in physical/outdoor/environmental ‘hybrid’ education.

First of these lessons, the persistence of the orthodox authority in practices of increasingly very costly ‘adventure’ activities that are ‘sustained’ as the non-negotiable consumerist ‘core’ of the conservative pedagogical and ‘educative’ experience of learners in the outdoors. Second, the increasingly gendered nature of the patriarchal discourse and the practice of adventure activity-focused old outdoor education. Third, the colonizing assumptions of these regressive efforts to rename and replace pre-existing hegemonic masculinist practices of outdoor education in a confusing effort to ‘legitimize’ the field from within but against the socio-ecological imperative for justices, inclusion and equity, and status of nature.

First, the emphasis in most traditional approaches to outdoor education remains on costly, equipment-intensive and time-demanding outdoor/adventure activities, exacerbating the costly credentialism required for leadership and instruction to effectively manage risk/safety and avoid legal litigation. Similarly unsustainable are the under-researched and largely weakly claimed (rhetorically/anecdotally only, non-empirical) cause and effect relationship and valorization of positive (only) benefits of the costly core adventure activities and outcomes of ‘personal development’ and, even, ‘environmental appreciation and care.’ The low-level descriptor of environmentally appreciative and aware and, even, ‘place’ sensibility and ‘attachment’ or ‘connection’ occurs, apparently, by pedagogical osmosis achieved through mere ‘contact’ with/of a particular version of ‘nature’ preferred by the leader/educator/facilitator which, linguistically, textually and symbolically, is also positively anthropomorphized and andromorphized as ‘friend’ (for an example of this uncritical re-naming’ of adventure, see Martin [1999]; but for critiques of this masculine ‘symbolization’ of ‘consuming’ nature under the guise of ‘critical,’ see also Payne [1994, 2005]). Being ‘friendly’ with nature is a rhetorical device only for those unwilling to contemplate the historical structures and purposes of a wide range of adventure activities, and ‘educationally’ is clearly not accountable to the historical positioning of the allegedly ‘outdoor educated’ leader/instructor or participating individual or group while ‘environmental studies’ is often relegated to the subordinate role of a mere ‘add on’ to the main agenda and traditional practices of core adventure-type activities (e.g., Thomas & Thomas, 2000).

From a critical perspective of outdoor education being used to allegedly ‘care’ for and be ‘friendly’ to nature, wished away in ‘non representational’ (Thrift, 2008), ‘non place’ (Auge, 1995) and mobile/liquid/fluid (Nakagawa & Payne, 2014) ways, are the simulation, objectification, standardization, instrumentalization and commodification of the nature they purportedly relate to, and connect with. This nature–culture tensional relation is a well-developed critique in social theory (e.g., Carvalho, 2010), environmental history (e.g., Cronon, 1995), environmental sociology (e.g., Heller, 1999), philosophy of nature (e.g., Toadvine, 2009) and cultural geography (e.g., Harvey, 1996).

More worrying, the quest for social and ecological justices that marked out the socially critical formulation of outdoor environmental education in the 1980s and 1990s

increasingly rings hollow, or shallow, as largely atheoretical and conservative forces regain momentum in orthodox approaches to outdoor education. There is, again, a compelling case to argue that ‘theory poor’ old and alternative outdoor education are highly consumptive of the material goods deemed necessary for safe participation (and leadership) in postmodernity but, at the same time, are highly exploitative of a diminished nature. These costs are carried by the student consumer. Nature’s rivers, rocks and slopes are often recast as a measurable, objectified and graded number. More broadly, various outdoor environments are anthropocentrically, metaphorically and pragmatically recast as a ‘gymnasium’ for climbing on, skiing over or paddling down in ways that are often utilitarian and highly functionalist, instrumental and performative in the way ‘nature’ is conceived, valued, revalued or devalued beyond the possibility of its ecological sustainability and even intrinsic value, argued ecocentrically for by many in the field of environmental ethics, dating back to Leopold’s ‘land ethic’ and his persuasive criticisms of outdoor recreation (Leopold, 1987).

Second, beyond the problem of reconceptualizing the physical education curriculum (and assumptions in teacher education), there are, of course, many other cultural–social and ecological factors complicating efforts to ‘environmentalize’ curriculum reform, including how that curriculum history also reproduces certain gender, class, sexuality, ethnicity, indigenous, land and place problems and issues. Again, traditional outdoor education in Australia is historically illustrative of a significant gender-bias problem, amongst other anthropological, sociological, cultural and ecological categories of critique. One example: masculinist practices and male-dominated histories of a curriculum field must be traced in reconstructing a critical ‘history of the present’ (Cook, 1999). Practically, ‘camping’ and ‘bushwalking’ in Australia have a long history of ‘colonizing’ the people and the ‘land’ through their cultural popularity for recreational escape to so-called ‘places’ and pilgrimages within (Garner, 2013; Harper, 2007).

Third, Australian outdoor education is, indeed in its identity crisis, a ‘product’ of diverse histories whose ‘traditional’ holds in adventure activities have limited the positive changes and progressive potential of, for example, VCE Outdoor and Environmental Studies. In general terms, the geo-epistemologically problematic practices of traditional outdoor education/adventure leadership/nature sports in Australia are effectively a consequence and product of the combined influences of the United Kingdom and the USA. Expeditioning (sometimes now referred to as ‘journeying’ in Australia), climbing, skiing and kayaking still dominate the ‘core’ activities of adventure-based outdoor education, particularly in pre-service teacher education and secondary school programs. This ‘hold’ of tradition, empire, military logic and imperial science and its hegemony in the outdoor field are a global concern of the consequences of modernity (see, e.g., Hansen’s [2013] critique of mountaineering as a ‘modern construction’). Even the relevance of core activities in outdoor education like canoeing to claims on ‘place’ (‘education’ and attachment) is being challenged by those relatively new to the field concerned about its colonial assumptions (Newbery, 2012), while ‘care for nature’ in rock climbing has been phenomenologically, materially and linguistically/metaphorically deconstructed (Payne, 1994).

Paradoxically, and fueling the accelerating identity crisis of the globalizing field, Australia is, ironically, the flattest and second-driest continent on the planet. Rivers, mountains and snow conditions for certain activities privileged discursively and practically are in increasingly short supply as the Anthropocene gains traction—unlike in the United Kingdom and many parts of the USA from where the old activity basis of outdoor/adventure education as recreation, character-building, nation-building and ‘leadership’

was sourced from within the remnant debris of a world wars ‘climate.’ Because participation in these adventure activities in Australia (and Brazil) typically requires traveling long and costly distances to ‘exotic’ locations deemed best for ‘adventure’ and requiring vast use of materially costly resources, they are, indeed, unsustainable practices of consumerism that encourages the further commodification and technologization of nature. This persistent cultural logic of hegemonic and patriarchal adventure activity training in old outdoor/adventure education in remote natures warrants critique beyond what we have only outlined and referenced here if we believe the environmentalization of the curriculum and/or development of ‘green’ responsibilities for social and ecological justice are a critical dimension of outdoor environmental education and studies (Payne, 2003).

Given this deeper analysis and critique of the traditional pre-1980s hold of adventure training and recreational leadership in contemporary outdoor education over and against the progressive environmentalization of the curriculum, Fay’s account of the ontological limits on rational epistemological change remains acutely relevant for curriculum developers to consider in relation to the specific geo-cultural/historical–ecological contexts in which they work and formulate programs that ecopedagogically are consistent with a wide range of justice concerns, sensitivities and circumstances (Canaparo, 2009; Payne, 2014).

In most respects, the identity crisis in outdoor education in Australia described in this paper can be sourced in the rhetoric–reality, philosophy–grounds, academic–practitioner or theory–practice gaps where the former of each terminological coupling typically aspires discursively to a progressive view of curriculum reform while the latter reflects a conservatively pragmatic, at times misleading, denial of ‘change’ potential that, effectively, aims to maintain the traditional *status quo* of outdoor/adventure curriculum and pedagogy. As an aside at this point, we cannot speak confidently about the discourse practices of outdoor education in contexts other than those highlighted here—that is for the reader to engage!

Viewed critically in this limited way, ‘old’ outdoor education as adventure even with environmental study-type ‘add ons’ is, we believe, an example of the greenwashing of the outdoor education curriculum we cautioned against in the introduction. This might also be the case when recent developments and trends in Brazil are included in the culturally comparative approach we use to consider ‘lessons learned.’ If so, the revealed contradiction of an identity crisis in outdoor education in Australia becomes a micropolitical example in educational reform efforts of the broader globally unsustainable politics of sustainability (Bluhdorn, 2011).

Evidence for the consequences of the identity crisis of outdoor education is plentiful. As Australia moves towards a National Curriculum in the formal schooling sector in 2014 called the ‘Australian Curriculum,’ the dedicated study of ‘education for sustainable development’ as a separate curriculum area is a notable exclusion. ‘Sustainability’ concerns in the Australian Curriculum will be a cross-disciplinary ‘add on’ theme and ‘non place’ to existing ‘core’ curriculum areas such as Mathematics, Science, English, History and Geography educations. The Phase 1 and 2 core of the National Curriculum implementation strategies will seek to improve basic literacies, advance Australia’s international competitiveness and contribute to national identity formation. Physical education has been included in a belatedly added-on Phase 3 under the banner of Health and Physical Education, but carries with it a ‘lesser’ status that might partially be rectified at the state level of education and curriculum policy implementation depending upon various state-level curriculum priorities and histories.

Despite the persistent authority of the traditional/conservative discourse of outdoor/adventure education based primarily on promoting physical activity risk/adventure/

training and the apparent ‘kickback’ the field suffered from the non-insertion in the new Australian Curriculum proposal, some contemporary efforts from academics remain notable in the continuous quest for the insertion of ‘environmental studies’ within the cultural logic and intellectual capital of critical outdoor education (e.g., Brookes, 2004; Gough, 2007; Lugg, 2004; Preston, 2004; Stewart, 2008, 2011). VCE Outdoor and Environmental Studies is likely to continue in the short term, hence the cautious optimism of three decades of curriculum struggle and contestation. However, it is necessary to acknowledge the present challenges for setting the ‘place’ of ‘outdoor/environmental studies’ in the educational sector in Victoria (Gough, 2007), as well as the even greater challenges for setting the ‘non place’ of outdoor education in the Australian Curriculum, despite the attempts of part of traditional adventure practice discourse that does not depart from nature sports to make a ‘new’ case (e.g., Gray & Martin, 2012; Martin, 2010).

### **A call for normative reflexivity**

The three-decade identity crisis in outdoor education in Australia, particularly the more progressive and bolder reforms undertaken in Victoria, can be characterized as an ongoing series of ‘tensions’ between the past–present–future, new and old, progressive and traditional, critical and conservative, ecological and physical, ecocentric and anthropocentric. The tensions lie between these dualisms, or polar opposites, recognizing that the contradictions and disputes inherent to the outdoor environmental education sub-field are, at least in part, the ongoing ‘curriculum contestation’ (Kemmis & Fitzclarence, 1986) consequence of the uneven incorporation of an ‘environmental rationality’ in different discourses that have their origins in variable geo-cultural/historical roots.

There are, following Fay (1987), limits to rational change in education and, in this instance, outdoor education as a/an (r)evolution of environmentalized physical education. These epistemologically and discursively driven limits apply to the older cultural ontologies of physical and sport education that, despite variations within and across those fields, are resistant to any environmentalized ‘departure’ from its traditional core, reiterating that there remains an important place for skilled and performative aspects of being educated and trained physically, including in the outdoors. Acknowledging this, but deeply mindful of the global quest for sustainability in the Anthropocene, and Al Gore’s populist exhortations about ‘inconvenient truths,’ we side with the critical, the progressive and the need to move to an ecocentric disposition in all curriculum areas of education. Given Brazil’s rapid economic development, educators will need to address these pressing issues which, now, have an intergenerational responsibility to the young, and the lessons learned here will assist those deliberations.

The assertive inclusion of environmental issues in the curriculum in each of Brazil and Australia, or any other ‘nation state’ (in globalizing conditions and imperatives), invites serious debate about the production of policies for higher education curriculum reform and is directly connected to the specific issues related to the definition of educational and professional goals of a curriculum field—full of tensions and identity crises. Drawing comparatively from the Australian experience provides a series of historically driven insights for critical debate in Brazilian efforts to reform certain aspects of and approaches to physical education and nature sports.

Our analysis has highlighted how different curriculum framings of the concepts of ‘nature’/‘environment’ are now demanded in any reconceptualization and recontextualization of physical education and ‘nature/adventure sports.’ These framings and concepts must be analyzed from the historical, geographical and contextual groundings that

ontologically are assumed in the socio-cultural–ecological logic of any curriculum policy document, including their formulation and dissemination in relation to the historical reference points, social structures and internal dynamics that operate epistemologically within each curriculum and scientific/academic field.

By comparatively ‘re-positioning’ the social–environmental debate/tensions contributing to physical, sport, outdoor and environmental educations, as we have undertaken here, our aim has been to reveal how particular knowledge and identity interests are likely to operate in the epistemological and methodological territories of higher education curricula reform efforts in Brazil. If so, we can better understand the different meanings inherent to the environmentalization of the physical education curriculum debate in accordance with the ‘imagined’ position that this issue takes in different scientific/academic fields and their specific curriculum. This, we believe, is a necessary step in establishing a truly interdisciplinary and transversal dialogue in environmental and physical education that respects the particularities amongst the diversity of academic/scientific disciplines. Understanding the Brazilian/Latin perspective of curricular environmentalization in dialogue with the main features of the Australian/Anglican perspective anticipates a heightened reflexivity in the critical social sciences about how the two different linguistically driven geo-cultural/historical epistemologies converge and diverge, or are silent.

Most significantly, in Brazil there has been a tentative but, nonetheless, significant movement towards the environmentalization of physical education programs that seems to be, at least in part, a consequence of government calls for the insertion of environmental education across higher education curricula in public universities. In Australia, the environmentalization of physical/sport/leisure/outdoor activities has largely been *ad hoc* and relied on innovation over the past three decades in the absence of belated federal government mandates that, as we have noted, are precarious given the recent election of a highly conservative government. Instead, there are initiatives such as ‘The Environment and Sustainability Learning and Teaching Academic Standards’ project. This aims instrumentally to develop and ‘standardize’ across a range of stakeholder groups and disciplinary interests what are referred to as ‘Threshold Learning Outcomes’ for the environment and sustainability field—documenting what students need to know and to be able to do upon graduation! Clearly, the 30-year development of critical outdoor environmental education is still a partial and ‘precarious identity’ development of ‘new’ knowledge interests and just commitments in its discourse practices that now has some legitimacy in undergraduate teacher education and upper secondary schooling programs. Despite ‘old’ resistances, there are important and interesting developments.

On the one hand, the insertion of the environmental dimension in physical education curricula may question some of the traditionally naturalized postulates and paradigms of the area—possibly reflected in a more global (de/re)construction of its traditional epistemological (and methodological) basis. On the other hand, the imagination and formation of a specific field of new knowledge can address more distinctively the potential synergies between the environmental dimension of education and curriculum reform and physical education/nature sports as a primary source of that reconstruction of education relevant to the challenges of the twenty-first-century Anthropocene and beyond. As we have seen with the Australian experience, this dialogical synergy might well contribute reflexively to the development of important academic insights and subsequent (re)construction of new/revised knowledge whose ‘framing’ (conceptualization, contextualization, representation, legitimation) is then picked up in a ‘normatively reflexive’ manner in specific scientific journals and Congresses that address inter-disciplinary and cross-disciplinary research efforts in, for example, Brazil (Payne, 2009).



However, the approaches to curricular environmentalization we have examined seem to share a common ‘issues’ difficulty—the patriarchal weight of a traditionally military/imperial/colonial, sport/skill-oriented ‘physical’ education and the largely young, masculine, middle-class/affluent ‘character’ of this tradition. This is a ‘live’ issue within the Brazilian/Latin perspective, as it persists in the Australian/Anglo perspective and context. It is clear that this is a global paradigmatic characteristic of the physical education arena. The critical approach to curricular reform we support raises serious ‘national,’ ‘regional’ and ‘global citizenship’ questions about broader concerns for equity, social justice, ecological justice, inclusion and democratic participation in education. Furthermore, this imperative seems to be easily naturalized by discourses uncritically incorporated into the physical and outdoor education fields and, given the limits to rational change thesis we introduced, it seems like ‘non-critical’ environmental, outdoor and experiential educations remain highly vulnerable for absorption into those mainstream discourse practices of old and orthodox approaches to leisure, sport and outdoor recreation (industries as entertainments). In the context of the neo-liberalization of ‘education,’ we caution (strongly) against that hegemonic and ideologically driven naturalization and normalization of otherwise alternative and critical discourse practices.

In offering this critique, we are very mindful of the powerful need for Brazilian educators and researchers to develop an environmentalized physical education curriculum that prioritizes its own geo-cultural epistemological ‘locations of knowledge’ (Canaparo, 2009) yet remains committed to social and ecological justices, as Freire might expect. Histories of physical education, education and teacher education must be reflexively examined in normatively transparent ways that are compatible with (re)‘imagining’ curricula in the future which add to this Brazilian geo-cultural–historical epistemology and ontology, as well as the ‘socio-ecological’ and environmental imperatives now required in reform efforts currently underway.

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### **Notes**

1. According to Carvalho (2010), ‘environmentalization’ is the process of internalization/incorporation of the environmental dimension in social spheres and in the moral formation of individuals. This can be identified in the emergence of new environmental issues and practices or in the reconfiguration/transformation of traditional practices that have internalized/incorporated environmental aspects to delineate a new phenomenon. The notion of ‘environmentalization’ carries a critical appeal when the emergence of new issues or the transformation of traditional practices presupposes the questioning of existing paradigms.
2. There is a vast international debate surrounding historical tensions between environmental and sustainability education (e.g., Moore, 2005; O’Connell, Potter, Curthoys, Dymont, & Cuthbertson, 2005; Thomas & Nicita, 2002) or education for sustainability (e.g., Lang, Thomas, & Wilson, 2006; Stubbs & Schapper, 2011; Tilbury, 2004), as well as other terms that have gained legitimacy over the last decades such as education for sustainable development (e.g., Down, 2006; Johnson, 2011; Kyburz-Graber, Hofer, & Wolfensberger, 2006; Sherren,

2008) and environmental/ecological literacy (e.g., Francis, 2011; Martin, 2008; Noonan & Thomas, 2004). Owing to word count restrictions we will not lay out these historical tensions in this paper, suggesting the above references for more in-depth reading about them. Our focus is set primarily on the concept of 'environmentalization,' which also draws tensions in how it is conceived in different countries/regions. The paper by Payne and Rodrigues (2012) is recommended for more in-depth reading on critical and post-critical frameworks on environmentalization in its evolutions in the 'North' and 'South.'

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