

Brian Wattchow · Ruth Jeanes
Laura Alfrey · Trent Brown
Amy Cutter-Mackenzie
Justen O'Connor *Editors*

The Socioecological Educator

A 21st Century Renewal of Physical,
Health, Environment and Outdoor
Education

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Preface

This book is for educators in schools, universities and the community, who are passionate about providing people with the values, knowledge and skills required to face the complex social and environmental challenges that are emerging in contemporary times and will prevail in the future. Socio-ecological approaches have been used successfully for some time in public health, but this book is the first to consider adapting a socio-ecological philosophy and practice to education. This new approach to education considers the personal, social, community, environmental and political dimensions that shape all learning experiences.

It is increasingly difficult to respond to social and environmental challenges from within a singular discipline. Instead, interdisciplinary approaches, forging connections across boundaries and being responsive to community and environmental contexts is an approach more likely to result in success. *The Socio-ecological Educator: A 21st Century Renewal of Physical, Health, Environment and Outdoor Education* presents an argument for a more collaborative and integrated approach within the movement disciplines. These separate subject areas, as they are often presented in schools and learning institutions, will benefit enormously from increased collaboration, cooperation and dialogue. A socio-ecological approach to movement and physical activity will provide students and programme participants with better ways to learn about and respond to real-world issues that impact their lives. Innovations in theory and practice in these subjects already provide rich opportunities to consider what will be required in a socio-ecologically inspired renewal of education. Drawing together these new ways of thinking about and doing sport coaching, physical education, and environmental and outdoor education provides a synergistic and powerful body of work for a futures-oriented approach to curriculum and pedagogy.

In Part I of the book, readers will encounter a discussion and critique of the four foundations of a socio-ecological education. First, the student's lived experience of learning is considered fundamental to a socio-ecological approach. A focus on lived experience reminds educators to educate the whole person where the ultimate aim is to provide a rich and fulfilling encounter with learning. The second foundation is a responsiveness to the learner's context and situation. This reminds the educator that

they are always working with learners and participants in a specific social, cultural and environmental setting. When a young person's learning is responsive to their context, they experience a sense of reconnection to place and the value of building relationships. The third foundation considers what kind of teaching and learning practices are likely to be most successful in a socio-ecologically inspired education that involves movement and physical activity. Experiential pedagogies shift the focus onto the processes rather than the product of learning. The history, values and practices that underpin experiential approaches are examined and considered from a socio-ecological perspective. The final foundation introduces the ultimate aim of socio-ecological educators, which is that learners, through genuine participation in their educational experience, will develop a powerful sense of agency. This sense of agency is the catalyst for young people to engage with educational, environmental and community agendas and issues.

Part II of the book presents a series of case studies that demonstrate the socio-ecological foundations in practice. Readers are taken on a journey through many educational settings in multiple countries. Each case study is presented as a chapter, and they range from early childhood through primary and secondary education to university. Community programmes with both children and young adults are also included. All of the levels of a socio-ecological perspective, from the personal to the political, are explored in depth through real-world examples. These examples take the reader from considering what is required for sport coaches to work with disengaged youth in the UK, to a community building a new school on the Canadian prairie. The story of an alternative approach to outdoor education on the Spey River in Scotland is counterbalanced by a consideration of the social and environmental agenda of adventure education experiences in the USA. Another case study looks at the process of renewal of the Health and Physical Education curriculum in New Zealand, while another goes inside an Australian secondary school to examine how students can gain a sense of agency and control over their learning. These case studies are not intended as perfect working examples of socio-ecological education. Instead, each embodies one or more of the foundations discussed in Part I of the book and requires readers to think across boundaries and to develop their own views about the philosophy and practice of becoming a socio-ecological educator.

The arguments and examples presented in this book do not attempt to provide a simplistic or formulaic model for education. Rather they present discussion, critique and example and aim to provoke and stimulate reflection and debate. Part III consists of the final chapter of the book that concludes with reflections about the socio-ecological journey so far. Despite convention and obstacles, new and alternative approaches to education are constantly emerging. The case studies presented in Part II of the book bare testimony to that fact. What *The Socio-ecological Educator: A 21st Century Renewal of Physical, Health, Environment and Outdoor Education* strives to do is to encourage educators around the globe to build new relationships and forge new learning communities for the benefit of young people.

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Nate is a climbing and mountaineering guide for Adventure Spirit Rock, Ice, and Alpine Adventures; the American Alpine Institute; and the National Outdoor Leadership School. His climbing and guiding adventures have taken him across the globe, from Greenland to the French Alps, and from Patagonia to high Alaska.

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Wynn Shooter is a Research Associate at the Utah Education Policy Center. He has worked within a wide variety of education programme areas, including wilderness experience programmes, corporate group trainings, therapeutic recreation programmes and university outdoor programmes. Throughout his career, Wynn has focused on implementing principles of experiential education to achieve a variety of learning and developmental outcomes for diverse populations of students in outdoor and classrooms settings. His research has focused on outdoor experiential education, decision making, trust development and education evaluation.

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Part I

Chapter 1

Starting with Stories: The Power of Socio-Ecological Narrative

Brian Wattchow, Ruth Jeanes, Laura Alfrey, Trent Brown, Amy Cutter-Mackenzie, and Justen O'Connor

Abstract In this first chapter we felt it important to introduce the editors of the book via a series of short autobiographical stories. In each case the author has chosen a few influential experiences that they believe have been crucial in shaping the development of their socio-ecological outlook as educators and researchers. In other words, in this first section of the book we are putting practical, lived experience prior to the theoretical explanation of what it means to be a socio-ecological educator. In this first chapter of Part I we want to lead with example and narrative. We then explore and reinforce the message with sound theoretical discussion of the crucial concepts that make up this unique perspective on educational philosophy and practice. In Part II of the book, different authors from a variety of backgrounds and work contexts explore socio-ecological ideas and practices via a range of case studies. Finally, in the conclusion chapter we summarise the book and reflect on the incorporation of a socio-ecological approach into educational and research settings.

Keywords Narrative • Socio-ecology • Reflection • Experience

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Introduction

The brief stories that follow are, of course, something of a simplification of the complex life experiences that contribute, in both obvious and less obvious ways, to each educator's knowledge and beliefs. The accounts are not intended to be complete or even substantial, but there are several important reasons why educators' stories provide a good place to start. First, they introduce the editors of this book as 'real' people who learn through experience, and who teach, think about and research educational practices. We want to signal to the reader that we each work within what Donald Schon (1987) has called the messy world of practice. Second, the diversity of stories shows that socio-ecological approaches are not 'siloes' into separate educational disciplines. Rather, diversity and difference are accommodated and even celebrated in socio-ecological approaches to education. Finally, we offer these stories because we want to signal the importance of narrative ways of knowing in developing beliefs and ideas about educational and research practice. As a series of starting points, each story raises a number of questions about the nature of learning in physical and health education, and in outdoor and environmental education.

Patton (2002, p. 115) suggests two foundational questions in relation to the kind of narrative work we present in this chapter:

What does the narrative or story reveal about the person and world from which it came?
How can this narrative be interpreted so that it provides an understanding of and illuminates the life and culture that created it?

The short narratives that follow provide the reader with the opportunity to pose Patton's questions. The emphasis here is on story, context and interpretation where the reader engages with the text in an act of meaning-making. What results, inevitably, is a 'polyvocality' (Hopper et al. 2008), reflecting a multiplicity of different voices, which brings complexity and nuance to the ways that researchers and educators write about physical activity and its socio-ecological connections. Sparkes (1992, 2002) has suggested that sport and physical activity researchers need to embrace alternative methodological approaches to counterbalance the dominance of scientism in these fields. Only through qualitative methods such as narrative inquiry, case study, semi-fictional and poetic representations and other phenomenological orientations can we hope to illuminate the character and essence of people's lived experiences. It is not our intention to mount an attack on the natural sciences, for many important discoveries about human nature have had their origins there. However, the narratives here do draw inspiration from the social sciences in the approaches they adopt. This is because our interest in this book is to attempt to gain an insider's view of how people experience sport, physical activity, physical, outdoor and environmental education. We want to portray the subjective 'lifeworlds' of the people and communities that these accounts are about.

As a result we hope that you, the reader, will be encouraged to approach the writing that follows as a 'search for these patterns, narrative threads, tensions, and themes' (Clandinin and Connelly 1998, p. 171). There is no clear-cut, single theory of socio-ecological education, so we use these stories to begin the process of teasing

out this complex concept somewhat gently, and then develop it as a powerful way of thinking about and practising education in the chapters that follow. We begin with Amy's story.

'This Was No Ordinary School Project': Amy Cutter-Mackenzie

I am the youngest of six siblings. My childhood was somewhat nomadic. My father was a boilermaker and my mother an active gardener while caring for my brothers, sisters and me. I was born in Melbourne, where I lived until I was 2 years old. Then the family moved to a small farm in Bahrs Scrub, on the Gold Coast in the hinterland of Queensland. When I was five, we moved again, this time to a small mining town, Tieri, in Central Queensland, 400 km inland from Rockhampton. We lived in Tieri until I was 14, at which point we then moved back to Bahrs Scrub (to the same place that we affectionately called the 'the farm').

My experience of growing up in an open-cut mining town had a profound impact and was, I feel, crucial in the development of my environmental disposition. Around the dinner table, the conflict between environmental conservation and destruction was always a subject of lively discussion. Often the 'destruction line' seemed to be favoured, which was hardly surprising given my family's livelihood depended on the use or exploitation of natural resources. However, this small town also provided a natural playground, as it was surrounded by dense bushland. As a very young child and then a teenager, I often spent full days either alone or with my siblings and friends exploring the bush with no supervision by my parents or other adults.

My experience of our farm was equally significant. In many respects it was 'home'. Since an early age I have had a strong and personal affinity with animals. Dogs and cats lived outside and inside the house and slept in our beds. The farm included a *mélange* of chickens, pigs, cows, goats and sheep ranging free on our land. We all raised and loved all the animals on our property. My job, from just 2 years of age, was to help Mum milk the cows and collect the eggs. My parents did not sell their stock. I can remember becoming very distressed and often inconsolable each time one of our animals was to be slaughtered. It seemed beyond my comprehension. My Mum always said the same thing to me, 'It's important for you to understand that this is where *your* meat comes from. It may seem cruel, but all of our animals have had a very good life'.

My internal conflict never ceased and at the age of 15 I became a vegetarian after doing a school project on the environmental effects of beef cattle farming in Australia. This was no ordinary school project. A national food (cereal) company, selected and sponsored a number of science students, nominated by their schools, to investigate the production of beef in Australia. For 3 months I lived in Alice Springs (in the Northern Territory of Australia), where I visited abattoirs and lived and worked on multiple cattle stations. During my farm stays, my job was to milk the

cows at 5 o'clock each morning, which was followed by working the land (largely fencing and preparing animals for slaughter). This significant life experience not only led me to make a decision to never eat meat again, but the process awakened the researcher within me, as I witnessed the mass production of meat (from paddock to feedlot to market), where animals were treated as a commodity with little dignity, integrity or compassion. This awakening led me to become a teacher and then later a researcher in the area of environmental education, so that I could make a difference for the environment, animals and the way people live their lives.

My passion for teaching and the environment came together during my studies towards a Bachelor of Education at Griffith University. In the third year of my degree I also commenced an Honours degree in environmental education. Already I had in mind that I would become a teacher-researcher. That journey, which began with my nomadic childhood and confronting the harsh realities of food production and its impact upon the lives of animals, the land, and the surrounding communities, has led me to becoming a teacher and environmental educator in Australia and overseas, while completing a doctorate in environmental education.

'I Am a Physical Educator': Trent Brown

In the beginning . . . First and foremost I am a physical educator. I was interested in 'sports science' as an undergraduate until a not-so-positive work experience opportunity at an institute of sport. This experience provided an awakening that educative physical activity and movement experiences for youth was more important to me than studying the stroke rate of an elite flatwater kayaker for 3 days. This 'awakening' reinforced the importance of physical education and its place in the curriculum for all young people, as opposed to the precious resources flowing to an elite few. It set me on a path that continues to this day.

An early entrée . . . I first heard the term 'socio-ecological' when I was a graduate student studying for my PhD. It came up when I was collecting articles and writing the literature review for my doctoral dissertation (Brown 2004) on physical activity and wellness. However, the term was not applied to physical education. It seemed to have more to do with health promotion and health education, as it was used as a framework for understanding practices with health-promoting schools (St Leger 1998). Later I remember it being connected to physical activity participation (Cale 2000) and, given the links to my developing research work, there were clearly parallels with socio-ecological approaches and its potential contribution to further understanding physical education. But it was not until some years later, during my first academic appointment, that I began to develop and apply socio-ecological approaches to my teaching practice and research.

My first appointment . . . In my interview for my first academic appointment I was asked, 'How do you see yourself – as a researcher, a teacher, an administrator or

something else?’ Given that I had prepared some answers, via a discussion with my doctoral supervisor, I was comfortable in answering the question:

I see myself primarily as a teacher. This is not to say that I don’t think that I can engage with research and see this as contributing additionally to my career as an academic, it is just that who I am and how I see myself, is first and foremost as a teacher.

I was pretty sure that I gave a coherent answer to this question. But what I did not know or engage with at the time was the broader direction of teacher education research. I came from a school of performance and exercise situated in a medical faculty. All they seemed to argue about in research was whether anything was significant beyond the $p < 0.05$! To move into a Faculty of Education, where teaching and research were more about qualitative approaches, epistemologies, ontologies, post-structuralism and interpretivism, was a difficult enough transition, let alone trying to set up a research agenda that was supportive of quantitative approaches to studying physical activity. However, I persevered. With the benefit of hindsight, I can see that the social, cultural and historical aspects of the ideas, ideals and practices that I held dear in physical education were indeed socio-ecological in nature.

Responding to the socio-ecological in my teaching and research TODAY! . . . Over the past decade I have been somewhat eclectic in my research activity: physical activity participation, physical education teacher knowledge, curriculum development, test scale development and validation, professional learning and, more recently, meaning and meaning-making of teachers as physical educators. This latter research area grew out of what I see as the marginalisation of physical education in the broader curriculum. In addition, I had begun to question the ‘invisible authority’ it seemed was often assumed by the author of research papers. In the research that I was reading it seemed that the concept of ‘I’, that first-hand account of lived experience, was seldom seen. I had begun asking questions that my quantitative statistical training as a researcher could not answer.

My transition from quantitative to qualitative researcher (and perhaps to a more socio-ecologically orientated educator) was a difficult one. Each time I tried to bridge my understanding I confronted the barriers of unfamiliar language and terms in the qualitative research literature. I had never even heard of ‘the paradigm wars’ that raged between quantitative and qualitative proponents and antagonists in the research world. For some time I felt adrift between two distinctly different views of the world. Eventually, I found support from some senior staff within my faculty, who encouraged me to persevere. I needed to succeed. I needed to engage, to find a way through this impasse. I began with a small academic piece on meaning and meaning-making in physical education (Brown 2008), before attempting to conceptualise a phenomenology of movement (Brown and Payne 2009). I forced myself to read more widely, including Arnold, Kleinman, Sartre, Merleau-Ponty and Dewey. At times I still felt I was an outsider looking in. But there were glimpses. I had started down a path and felt like I had begun my Ph.D. all over again. For me, socio-ecological education it is about understanding the individual as an actor and meaning-maker. This is something I have lived through in my own development

as a physical educator. In essence, I feel that I have gained some of my most valuable insights into a socio-ecological perspective by becoming a socio-ecological educator.

‘Experience, Time, Epiphany’: Laura Alfrey

Why do I call myself a socio-ecological educator? Three words spring to mind when I reflect upon this question: ‘experience’, ‘time’ and ‘epiphany’. The latter may seem a little sensationalised, but if an epiphany may be thought of as finding the special piece(s) of a jigsaw puzzle that sees the whole picture emerge, then it makes sense. With the benefit of hindsight I am able to track my (physical) education ‘experiences’ and see how often it was the unplanned and unintended that allowed me to find more pieces of the puzzle. I would be naive to say that my jigsaw is complete, but I have definitely now accrued enough pieces to know what I am working towards. And that is, educating, and helping others educate, in ways that acknowledge the multiple levels of our personal, social and environmental ecologies. Each of these levels needs to be responsive to people and place and thus become more relevant, engaging and likely to result in meaningful learning. If this is my current position, how did I get here?

I grew up in Gomersal, a little village in Yorkshire, in a house where my parents live to this day. As a child, any free time at home was spent with friends, dodging bulls in the barley fields, riding my bike along the country lanes, running races or reinventing the age-old pastime of playing marbles. I don’t like to brag but my success on the marble circuit was quite impressive and was evidenced by a large glass jar in my parents’ hallway that housed my winnings. Every weekend my parents and I would pack up the cherry-red Volvo 340 and head for pastures new. Our travels took us to the riverbank in Burnsall, the tarn (glacial lake) in Malham, or the forests of Sherwood (where Robin Hood used to roam . . . according to the legend). Such trips instilled in me a love of the outdoors and being active from a young age. At the time I thought that this was what all families did. I can now see that I was in a privileged situation and that the opportunities my parents presented to me were invaluable in terms of developing a love for movement and the outdoors. A socio-ecological perspective encourages you to look beyond individuals and appreciate how their relationships with others and the environment influence their thoughts and behaviours. Looking back through a socio-ecological lens I can now see that my current interests and approaches as an educator and researcher have been influenced heavily by both my parents and my formative experiences in the wild countryside of Yorkshire.

My parents were never particularly sporty, but they were very active and supportive of my physical and adventurous ways, even when I came home with my new shoes scuffed and worn within an inch of their lives because I had used them to slow my bike down on a big descent. As I grew up and began to play in the school sports teams, the support of my parents was manifested by transporting

me to and from events, and financing my hockey, netball, athletics, karate, judo, swimming, and so on. You can tell where this story is going, can't you? At school my favourite subject was physical education, closely followed by geography. Both of which involve movement, people and places. It is the relationship between these three aspects of social ecology that continue to grasp my attention.

Out of a class of 30 girls, I remember wondering why only three or four of us enjoyed and willingly participated in our physical education. To me it was natural and fun and I experienced success to fuel my passion further. For a short time I ran the 100 metre sprint faster than any girl at St John Fisher Secondary School and I thought selection for the Olympics was the next stop. I was a big (or rather – fast) fish in a small pond. But my initial and positive experiences of physical education meant one thing: if I wasn't going to the Olympics I was going to be a – you guessed it – physical education teacher. I wanted to help everyone enjoy movement and games as much as I did.

So, with that in mind, I went to university in Chester, England, at a college of the University of Liverpool. I was getting good grades and graduation was close. But then I enrolled in a unit entitled 'Issues in Physical Education' that was taught by (now) Professor Ken Green. Until this point I had never been encouraged to think critically about physical education or its role within the school curriculum and society more broadly. As the unit progressed, I developed new and critical understandings about an activity that I had taken for granted. I began to gain some insights into why most of the girls at school had not liked physical education and realised that the subject as I knew it did little to promote in *all* a love and understanding of movement. I began to doubt some aspects of physical education. I wanted and needed to learn more.

I started working in schools and at the same time began working towards a Masters degree in Sociology of Sport, Physical Education and Exercise. Holding my Masters certificate in my hand a few years later, I still wanted to know more about the theoretical underpinnings of physical education and the ways in which theory translated into pedagogical practices. I accepted a scholarship to do a Ph.D. at Loughborough University and this allowed me to pose and seek answers to some deep personal and professional questions about my field. While doing my doctorate I continued to work with schools and the Institute of Youth Sport. This again gave me the valuable opportunity to test my ideas in practice and also have the messy world of work upset the apparent certainty of theory.

My doctoral research was concerned with the promotion of healthy, active lifestyles and as part of a literature review I explored the concept of an 'Active School' (Cale 1997). The Active School uses a socio-ecological approach to promote opportunities for physical activity. I remember the first time I read the term 'socio-ecological'. I probably muttered the word 'What?' aloud at the time. That said, as soon as I read the explanation provided by Cale and Harris (2005) it made immediate and complete sense. This was my epiphany. I had found a big piece of the puzzle: recognising that early research on physical activity was largely individualistic and was thus a very narrow and incomplete way of understanding the complexities of human choices and behaviour.