



7TH INTERNATIONAL
OUTDOOR EDUCATION RESEARCH
CONFERENCE
UNAMA'KI/CAPE BRETON ISLAND
NOVA SCOTIA, CANADA

BOOK OF ABSTRACTS

Cape Breton University
JULY 4-8, 2016

Publisher: Cape Breton University

Title: 7th International Outdoor Education Research Conference
Book of Abstracts

Authors: Individual Abstract Authors

Compilers: Patrick Maher, Morten Asfeldt, Catalina Belalcázar

Cover

Graphics: Gail Jones

ISBN: 1-978-77206-069-0

ACKNOWLEDGEMENTS

A conference such as this one only happens because of the vision, dedication, and commitment of many people from throughout the global outdoor education research network. First, we are grateful to those who imagined the 1st International Outdoor Education Research Conference and the hosts of the subsequent six conferences, which have laid the groundwork and served as exemplary models for this conference.

Regarding this 2016 conference, we are especially grateful for the diligence of Catalina Belalcázar, student assistant at Cape Breton University (CBU), for her leadership and followership on a vast array of administrative and organizational duties. We are equally indebted to the local organizing committee for their on-the-ground planning and management of a long list of details and tasks. The local organizing committee included: Bettina Callary, Chantelle Cormier, Patrick Howard, Nadine Lefort, Charlotte MacDonald, Wayne McKay, Emily Root, Eileen Smith-Piovesan, and Jeff Ward. We also acknowledge the generous financial and in-kind support from the School of Arts and Social Sciences and Office of Research and Graduate Studies at CBU, Onsite, Arc'teryx, Don Root, CBU Conference Services, CBU Marketing and Communications, the Cape Breton Health and Recreation Centre, Brittany Erickson, Nigel Kearns (Event and Project Services) and the various field trip providers, caterers, entertainment, etc.

We owe the conference academic committee a great deal of thanks; the members provided critical feedback and ideas that have shaped this conference. In addition, we depended on their experience and insight in the abstract review process. The academic committee included: Søren Andkjær, Mike Boyes, Janet Dymont, Barbara Humberstone, Mark Leather, Erik Mygind, Kristi Pederson-Gurholt, Tom Potter, Alistair Stewart, Fiona Stoddart, Takako Takano, and Glyn Thomas. Due to the volume of abstracts received, and our desire to have each one blind reviewed twice, we also called on Simon Beames, Mike Brown, Beth Christie, Tonia Gray, Bob Henderson, Ryan Howard, Phil Mullins, Stephen Ritchie, Emily Root, Heidi Smith, and John Telford for assistance in the abstract review process. Thank-you.

Finally, we thank the presenters and attendees of all seven IOERC conferences who have inspired each other to continue to build and develop the diverse research that shapes our growing understanding of outdoor education in all its forms. We especially thank all of you who have made your way to Canada and the eastern shores of Unama'ki (Cape Breton Island) for this 7th International Outdoor Education Research Conference.

Sincerely,

Pat Maher (Cape Breton University)

Morten Asfeldt (University of Alberta - Augustana Campus)

Conveners of the 7th International Outdoor Education Research Conference

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	2
WELCOME	7
ABSTRACTS	8
(Re)placing Outdoor Education: The Micro-Adventures of the Everyday.	8
‘Blue spaces’ and outdoor studies-Health, wellbeing, sustainability, life-long learning and human-nature interaction.	9
“Digital Narratives of Snowy Mountain Experiences: An Aesthetic Pedagogical Design to Stimulate Students’ Academic Reflection.....	10
“Something very special happened out there”: Student experiences of connection to nature.....	11
“You have just walked past something very special!” Seniors’ stories about teaching with the land.	13
“You want us to take outdoor education where?”: Student experiences of studying outdoor education online.....	15
A critical view into pupils’ experience of Education Outside the Classroom and Well-being.	17
A preliminary look at the development of resilience through targeted educational intervention: The impact of outdoor education on resilience.	19
A qualitative study of the perceived significant life outcomes of a university winter outdoor education course.	21
A Unique Mega-Review - a novel approach to understanding best practice in the outdoors.	23
Aboriginal Education’s Influence on Canadian Forest School Programming.	25
After 5 Years: What we have learned about outdoor education, educators, and the students we work with at the Maple Ridge Environmental School.....	26
Art and outdoor education: Investigating possibilities for representing lived experience.	27
Assessing the Divide between Humans and the Natural World: Impacts and Effects of Increased Experience in Natural Areas.	28
Attunement: Essential in Developing Quality Reflection in Teacher Education.	29
Aventura 92 - Ruta Quetzal: 30 years of educational expeditions.	30
Becoming a place-responsive practitioner: Re-conceptualizing outdoor education in the Swedish curriculum.	31
Beyond the walls: within the curriculum. Exploring the niche position of place-based outdoor learning for primary schools.....	32
Camping as curriculum?	34
Canada as Place: Exploring Embodied Pedagogies and the Natural World Through Indigenous Literature.	36
Challenge Course Research. What’s Out There?.....	38
Coastal Kindergartens: From Norway to Greece.....	39
Crossing Bass Strait: insights from an Everest of the sea	40
Cultural Differences of a Canadian and Danish Outdoor Education Experience	41
Deep nature connection: Explicit ways of ‘teaching’ through experience.	43

Defining Moments: Women’s contribution to outdoor education leadership and an examination of the gender divide.	45
Development of an Inter-Sport Collaboration to Support Outdoor Education Opportunities as Defined by the Long Term Athlete Development Model.	47
Development of udeskole - a development and research project by the Danish Ministry of Education and Danish Ministry of Environment.	48
Dirty Business? A Feminist Critique of Growing “Healthist” Approaches to Nature and Its Implications in Outdoor and Environmental Education.....	50
Dis-placing Myself: Decolonizing a Settler Outdoor Environmental Educator.	52
Djurite/Mt Arapiles and outdoor education: Exploring place-responsive pedagogical opportunities. .	54
Do Intensity Levels Affect Participants’ Feelings of Stress Reduction After an Outdoor Activity?.....	56
Do outdoor programs really enhance wellbeing? Preliminary findings from a world-first study.	58
Does Outdoor Education get better with age? A 30-year longitudinal study of the impact of outdoor education upon adolescent participants.	61
Ecophilosophy Fragments: The importance of Sigmund Kvaloy to Outdoor Education.	62
Effects of a large scale EOtC intervention on pupils’ well-being	63
Encounters with Australian wildlife: Fatalities, myth and outdoor education opportunities.	65
Evaluating the benefits of residential outdoor adventure courses; assessing the implications for improved student retention in Higher Education.....	66
Experiential and community-engaged outdoor learning: The Youth in Motion initiative.	67
Exploring artful meanings in outdoor play and learning.....	68
Exploring the ‘hidden curriculum’ in outdoor adventure education	70
Exploring young peoples’ attitudes to society after a residential outdoor learning experience.....	71
Facilitating School Gardens with Visiting Workshop Educators.	72
From mentoring to training in high-level mountaineering.	74
Gear banks in Denmark - organization, development and significance.	75
Hooked on Osprey - the role of an “iconic” wildlife species in outdoor education	76
How curriculum learning in natural environments becomes embedded: a view through the lens of cultural density.	78
How do schools position and profile Outdoor Education to the public through their online presence?80	
Human nature relations through the lens’ of three European outdoor education traditions: a case study of a masters programme	82
Inclusive outdoor learning: Comparing Montréal and Toronto.	84
Innovative outdoor fieldwork pedagogies in the higher education sector: Optimising the use of technology.....	86
Journeys in the winter wilderness: An exploration of the traditional winter camping experience	88
Learning ecologically: A relational approach skill development and specialization in fly fishing.	89
The Feasibility of Using Heart rate Variability Methods in Winter Wilderness Travel Contexts.....	90
Learning Outcomes and Critical Elements of Cross-Cultural Educational Expeditions.....	92

Liminality, culture and place: a contribution from outdoor education to sustainable development? .	94
More than People, Equipment and Environment; the design of a risk assessment method which considers hazards and risks throughout the led outdoor system.	96
Moved by Nature? Children’s Relations to Significant Outdoor Places	98
Natural Clowning: Wayfinding towards Connection and Flow.	99
Natural Connections: schools’ engagement with learning in natural environments.	100
Outdoor adventures for grieving children in a transcultural context.	102
Outdoor education and emotional support.	103
Outdoor Education and Learning Engagement	105
Outdoor environmental education research in Australia: tales and trajectories of change (as told in two journals)	107
Outdoor Journeys Bolognese.....	109
Outdoor learning as a common ground between formal and non-formal education.	110
Outdoor Orientation Programs in Canadian Universities.	112
Out-of-classroom learning experiences at Gordonstoun School.....	114
Planning to make the right call: The influence of planning on decision making in outdoor education contexts.....	115
Playtime: Developing creativity through outdoor education	117
Practical Tips for Conducting Research in the Outdoors.	120
Probing Outdoor Educators’ Pedagogical Content Knowledge: Lessons from Tasmania, Australia ..	122
Reconceptualising evidence in outdoor education research.....	124
Reimagining Print Literacy through Outdoor Locales: A Crafted Library on a University Campus. ...	125
Seeing what they see. Exploring the potential of GoPro video cameras in outdoor research with children.	127
Smith’s Bush: a case study in Outdoor Philosophy.	129
Social media and the airbrushed outdoor experience: Friend or Foe?	131
Stories and storytelling as tools of teaching for change	133
Student Perspectives on the Perceived Value of a Mandatory Outdoor Experience Program at a University in Canada.	134
Sustainable Science Education through outdoor experiences.	136
The Danish TEACHOUT research project 2014-2017: integration of udeskole in schools.....	137
The Effect of Ambient Temperature on Heart Rate Variability-Derived Energy Expenditure During a 12-day Canoe Trip.	140
The effects of a wilderness mountaineering expedition on the development of Japanese college students and their environmental ethics.	142
The impact of outdoor education on the body image and self-efficacy of adolescent girls.	143
The Influences of an Outdoor Education Program for Deaf Children on the Staff who can Hear.	145
The Ontario Wilderness Leadership Symposium: A promising platform to engage, connect and support the future leaders of wilderness trips.....	147

The Promise of Phenomenology	149
The Relationship Between Outdoor Experience and Body Image in Female College Students.	150
Towards a coherent theory of experience and education via occupations: a Deweyan excursus	152
Trusting the Journey: Embracing the Unpredictable, and Difficult to Measure Nature of Wilderness Educational Expeditions.	153
Turfriluftsliv - constraints and possibilities	155
Understanding educational and well-being implications of learning outside the classroom in Singapore.	156
Understanding the hidden curriculum in adventure education: A Delphi Study.	158
UPLOADS: Applying systems thinking to understand and prevent injury during led outdoor activities	160
Why we shut down the randomized controlled trials part of our own adventure therapy study - and what we did instead	162
Words in Wild Spaces: Inspiring place relationships through wilderness literature.	163
Author Index	165

WELCOME

Dear Conference Participants:

On behalf of the local organizing committee, the international academic committee, Cape Breton University and the people of Unama'ki (Cape Breton Island) it is our great delight to welcome all conference presenters and attendees to the 7th International Outdoor Education Research Conference.

Continuing in the tradition of previous International Outdoor Education Research Conferences, the aim of this conference is to build on the social, cultural and critical dimensions of research and theorizing in diverse outdoor traditions, including: education (both learning and teaching), recreation, place, sustainability and therapy.

It is our hope that your participation in this conference will be a meaningful, challenging, thought provoking, affirming, and above all, a fun experience where you will build on, and share, your knowledge and understanding of outdoor education research. In addition, it is our hope that you will leave inspired to ask interesting and demanding questions that lead to innovative research and that you find colleagues at this conference who will become important collaborators across your research and personal lives. Enjoy!

Sincerely,

Pat Maher (Cape Breton University)

Morten Asfeldt (University of Alberta - Augustana Campus)

Conveners of the 7th International Outdoor Education Research Conference

ABSTRACTS

(Re)placing Outdoor Education: The Micro-Adventures of the Everyday.

Jay Roberts

Earlham College, United States

With the increased emphasis on sustainability, localism, place-based education, and “micro-adventuring,” the time has come to critically examine the long-held trip and expedition construct within the outdoor education field. This paper will explore the theoretical influences of Romanticism on the field highlighting both the possibilities and limitations that come with this worldview. Using the Romantic concept of the “sublime,” I will argue that outdoor experiences have traditionally settled around the organizing motif of the trip and the expedition in contrast with local and “everyday” experiences and, as a result, the field has missed opportunities for wider acceptance and usage as well as solidarity with like-minded pedagogies in environmental and place-based education.

In (re)placing outdoor education, I will make the claim that a critical awareness of the Romantic legacy, combined with a renewed focus on the concept of place and everyday experiences will allow the field of outdoor education to expand in influence and inclusion.

Biography

Jay Roberts, Ph.D., is the Associate Vice President for Academic Affairs and a professor of Education and Environmental Studies at Earlham College. He is the author of two books, *Beyond Learning By Doing* (2012) and *Experiential Education in the College Context* (2015), as well as numerous articles within the fields of outdoor, environmental, and experiential education.

'Blue spaces' and outdoor studies-Health, wellbeing, sustainability, life-long learning and human-nature interaction.

Barbara Humberstone

Bucks New University, England

This presentation will take a 'wet' geographies approach to examining pedagogies of 'blue spaces'. Blue spaces have only recently become places where 'learning to be in the body' has been critically considered and the potential for human and more-than-human ecological sensibilities explored. In this presentation, I will draw attention to the emerging research and ideas on the significance of physical activities in blue spaces and the implications to the human wellbeing through kinetic empathy. The significance of the senses is highlighted in enriching 'how' skills are embodied through the affective and kinesthetic in water-based sensoria. I argue that on occasions these experiences engender a form of shared 'kinetic empathy' (Thrift, 2006; 2008), and provide the potential for ecological empathy/sensibilities engendered through corporeal engagement within blue spaces.

Taking a phenomenological approach, I will then consider the lived experiences of people engaged life-long in water based activities, critically examining blue space potential for ecological empathy/sensibilities and wellbeing engendered through this corporeal engagement.

References

Thrift, N. (2006). *Space*. *Theory, Culture and Society*, 23(2-3), 139-155.

Thrift, N. (2008). *Non-representational theory: Space, politics, affect*. London: Routledge.

Biography

Barbara Humberstone, PhD, is a professor of Sociology of Sport and Outdoor Education. Her research interests include: embodiment and nature-based sport, and well-being and outdoor pedagogies. She co-edited *Seascapes: Shaped by the sea* (2015); *International Handbook Outdoor Studies* (2016); Editor of *Journal of Adventure Education and Outdoor Learning*. She is a keen windsurfer, walker, swimmer and yogini.

“Digital Narratives of Snowy Mountain Experiences: An Aesthetic Pedagogical Design to Stimulate Students’ Academic Reflection

Kirsti Pedersen Gurholt

Norwegian School of Sport Sciences, Norway

The purpose of this paper is to explore the educational potential: (1) in using every day digital technologies to engage and enhance university students’ academic and pedagogical reflection; and (2) to stimulate creative and novel perspectives and methodologies to be used in the students’ subject-related master-thesis research. The subject under scrutiny is Outdoor Studies, with a particular attention on landscape exploration, experience, and meaning. During a one-week fieldtrip, two cohorts of about 20 international students (n=40) of many nationalities, were exposed to ‘wild’, sub-Arctic winter mountains by employing an ethnographic inspired approach. The students were asked to write a diary and collect information about their particular landscape explorations; their immediate impressions, feelings, thoughts, questions, reflections, and dialogues with peer students, teachers, and other visitors in the area. In addition, they were inspired to record soundtracks, generate visual images, photos, videos, drawing/sketches, whilst exploring the snowy landscape on skis and snowshoes. Moreover, preparing food and making overnight stays outside were integral. After having returned to the university, the students were invited to rework their material through an intensive two-day guided process of digital storytelling, employing everyday technologies such as cameras, audio recordings, mobile phones, and ipads, whilst crystallizing their main experience, reflection, or meaning of the mountain experience. This paper employs an action research approach and discourse perspective, in exploring and understanding the digital narrative-approach as a tool in researching human-landscape relations and meaning.

Biography

Kirsti Pedersen Gurholt is a professor of pedagogy and outdoor studies/friluftsliv at Norwegian School of Sport Studies (NSSS) and leads the two-year ERASMUS MUNDUS joint masters programme Transcultural European Outdoor Studies at NSSS.

“Something very special happened out there”: Student experiences of connection to nature.

David Hayward

University of Tasmania, Australia

Heidi Smith

University of Tasmania, Australia

David Moltow

University of Tasmania, Australia

Connections with nature has a long history in the outdoor education literature with nature relations as one of the three original components of outdoor education, along with self and others. Initially, nature was predominantly seen as a place to physically challenge individuals in order for personal growth to occur. Since then, there has been a body of literature that has questioned and critiqued this approach. In the past few years a consistent call for a deeper understanding of the student experience of field experiences has been emerging. With the conscious shift to place based pedagogy and a focus on nature connection, this presentation will share early findings from a research project that explored the student experience of nature connection during an extended wilderness experience. Personal narratives of the researcher’s own experience are shared first, followed by early findings from initial teacher educators in terms of how they feel and experience connections to nature. The research brings together Martin’s (2005) human to nature relationship signposts and the Affective Domain Taxonomy (Krathwohl, Bloom & Masia, 1964) as a conceptual framework through which to understand and elucidate the emotional experience of nature connection. Ruminations of how to teach deep nature connection explicitly to students will also be shared.

References

- Krathwohl, D. R., Bloom, B. S., & Masia, B. B. (1964). *Taxonomy of educational objectives . The classification of educational goals. Handbook II: Affective Domain*. New York: David McKay Company.
- Martin, P. (2005). Human to nature relationships through outdoor education In T. Dickson, T. Gray, & B. Hayllar (Eds.), *Outdoor and experiential learning: Views from the top* (pp. 28-52). Dunedin, New Zealand: Otago University Print.

Biographies

David Hayward is an Honours student of outdoor education and final year student in the Bachelor of Education (Outdoor Education and Design and Technology). He has a growing interest in increasing his understanding of human nature relationships and how to teach this through researching student experience.

Heidi Smith is Lecturer in outdoor learning and teacher education professional studies, Course Coordinator of the Bachelor of Education Primary and Associate Degree Education Support, at the University of Tasmania. Her research interests include outdoor learning, leadership, nature connection, and improving quality of 21st Century learning and teaching practice.

David Moltow is Lecturer in Philosophy and Ethics and Director of Student Engagement in the Faculty of Education at the University of Tasmania. His principal research interest is in the ethical underpinnings of educational policy and curriculum. He is also interested in how the aesthetics of learning spaces relate to the pedagogical concepts that inform their design.

“You have just walked past something very special!” Seniors’ stories about teaching with the land.

Anna Keefe

University of British Columbia, Canada

Jolie-Mayer Smith

University of British Columbia, Canada

This presentation explores the learning taking place in the Intergenerational Landed Learning Project, an initiative that partners young and older adult volunteers with children at an urban farm to teach them about environmental issues and healthy food. Volunteers work with a small group of children throughout the school year, mentoring and teaching their group using experiential, hands-on methods. Volunteers were surveyed and interviewed to learn more about their experiences with the project and their pedagogical strategies. This presentation focuses particularly on stories from seniors who are volunteering, and the insights that they provide into teaching and learning by taking their cues from the land. Seniors’ stories illustrate an understanding of the farm and its surrounding environment as a space to learn through observation, caring and connection. They give the children extra attention and guidance to learn about and from natural cycles and phenomena. By engaging with the land, they guide students in learning to sharpen their powers of observation and analysis. They also model care for others and the earth in order to help students locate themselves within the farm space and the world. Their stories reveal that deep learning can occur when it follows the synergy between students and the land, and that these strategies are particularly effective for students who are not engaged by standard classroom learning. This presentation will share some of the seniors’ stories, photos of the project in action, and a summary of key concepts and pedagogical strategies.

Acknowledgements

We gratefully acknowledge assistance by Samira Thomas and Stacy Friedman. The Intergenerational Landed Learning on the Farm Project is supported by multiple public and private donors, including significant funding by the Natural Sciences and Engineering Research Council of Canada.

Biographies

Anna Keefe is a Ph.D. Candidate in Language and Literacy Education at the University of British Columbia. Her research interests include arts-based literacy and multimodality, place-based learning, intergenerational learning, and Indigenous pedagogy. She holds an M.Ed. in Arts in Education from the Harvard Graduate School of Education.

Dr. Jolie-Mayer Smith is a Professor Emerita in the Department of Curriculum and Pedagogy at the University of British Columbia. Her research interests include teacher education, postsecondary science education, and environmental and garden-based education. She and Dr. Linda Peterat initiated the Intergenerational Landed Learning on the Farm Project.

“You want us to take outdoor education where?”: Student experiences of studying outdoor education online

Janet Dymont

University of Tasmania, Australia

Allen Hill

University of Tasmania, Australia

Heidi Smith

University of Tasmania, Australia

With a view to attracting more students and offering flexible learning opportunities, online teaching and learning is becoming increasingly widespread across the higher education sector. At least one Australian university outdoor education course has not escaped this growing trend. At the 2013 IOERC Conference in Dunedin, New Zealand, we presented research findings into lecturer perceptions of moving to online learning in outdoor education. This presentation shares the results of stage two of that research project which investigated student experiences of taking outdoor education courses online. Semi-structured interviews were conducted with 8 students enrolled in the online space as they completed a foundational tertiary outdoor education course. Analysis revealed a number of benefits, challenges and tensions that emerged for students who studied outdoor education online. Themes that emerged from the research study include: student engagement, community interaction, the importance of innovative pedagogical strategies and authentic assessment tasks. A key take home message that emerged in the interviews was that many students expressed deep gratitude for the opportunity to study outdoor education online as they were unable to commit to on campus learning. They expressed appreciation for the opportunity to learn about the power and potential of outdoor environments to contribute to quality teaching and learning spaces.

Biographies

Janet Dymont is a Senior Lecturer and Course Coordinator in the Master of Teaching in the Faculty of Education at the University of Tasmania. Prior to this appointment, she worked at Lakehead University (Canada), Outward Bound, Project DARE and NOLS.

Allen Hill is a lecturer and researcher in sustainability education, outdoor learning and health and physical education in the Faculty of Education, University of Tasmania. He is co-editor of the book *Outdoor Education in Aotearoa New Zealand: A new vision for the 21st century*. Allen's current primary research is investigating sustainability policy and practice in Australian schools.

Heidi Smith is Lecturer in outdoor learning and teacher education professional studies and Course Coordinator of the Bachelor of Education Primary and Associate Degree Education Support at the University of Tasmania. Her research interests include outdoor learning, leadership, nature connection and improving quality of learning and teaching practice incorporating 21st Century Learning and ePortfolios.

A critical view into pupils' experience of Education Outside the Classroom and Well-being.

Anne Holm Jensen

University of Copenhagen, Denmark

Mads Bølling

University of Copenhagen, Denmark

Glen Nielsen

University of Copenhagen, Denmark

Matt Stevenson

University of Copenhagen, Denmark

Peter Bentsen

Health Promotion Research, Steno Diabetes Center, Denmark

Education outside of classroom (EOtC) is characterized as compulsory school activities taking place outside the school buildings as a supplement to classroom teaching to provide engaging and varied teaching. Previous research indicates that EOtC can have a positive impact on pupils' social and academic skills and well-being. However, there is a lack of research on pupils' own assessment of their subjective well-being, as an indication of how pupils perceive EOtC. Therefore, we aim to investigate how academically strong and academically challenged pupils respectively experience EOtC, and how this influences their well-being in school. During the school year 2014/15, a Danish 5th grade school class participated in EOtC twice a week. Five academically strong and five academically challenged pupils were sampled on the basis of their test results in reading (mother tongue) and math. Qualitative interviews with the pupils were conducted autumn 2015. The intended impact is not to generalize but to inform about pupils' experience with EOtC. By using an extreme case - a class with a thorough use of EOtC - we gain sound data on so-called 'good' EOtC. This study is still in process, but based on the few studies investigating well-being in outdoor learning environment, we expect that EOtC is positively experienced among all pupils corresponding with greater well-being. However, we could also expect that among academically challenged pupils, a more unstructured activity based learning environment may lead to reduced well-being, which could also count for academically strong pupils seeing EOtC as a distraction or waste of time.

Biographies

Anne Holm Jensen, Master student in Sociology, Faculty of Social Science, University of Copenhagen. Anne is currently engaged with the TEACHOUT project investigating how academically strong and academically challenged pupils experience EOtC, and how this influences their well-being in school.

Mads Bølling, PhD Student, MA(Ed) in Educational Sociology, Department of Nutrition, Exercise and Sports, University of Copenhagen. Mads is currently engaged with the TEACHOUT project aiming to discover if, how and why Education Outside the Classroom has an impact on pupils' social relations, inclusion, well-being and motivation.

Glen Nielsen, PhD, Assistant professor in social science of sports and exercise, Department of Nutrition, Exercise and Sports, University of Copenhagen

Matt Stevenson, PhD Student, Department of Geosciences and Natural Resource Management, University of Copenhagen. Matt is currently exploring how exposure to natural environments may improve cognitive performance in children with and without ADHD.

Peter Bentsen, Senior Researcher, MSc, PhD, Health Promotion Research, Steno Diabetes Center. Peter's research has generally focused on 'people, places and pedagogies' in relation to education and health promotion in the interface between the health, social and human sciences.

A preliminary look at the development of resilience through targeted educational intervention: The impact of outdoor education on resilience.

Heather Grenon

Federation University Australia, Australia

Peter Martin

Federation University Australia, Australia

Outdoor Education (OE) seeks to create an effective learning environment through the integration of contextual factors, most importantly the natural environment, specific activities undertaken and relationships between group members. Research has linked OE to a range of differing educational outcomes. Of these, this study is focused upon the impact OE programs have on the development of resilience in young people.

While some research has investigated the development of resilience as a consequence of participation in OE programs, few look directly at the factors within the practices of OE that most influence this. Definitions of resilience vary, but it can be understood as people displaying competent functioning despite exposure to high levels of risk or adversity (Hunter, 2012). Resilience has been measured through the use of self-report questionnaires, but, as Ungar & Liebenberg (2009) have posited, it should be assessed and explored to more depth through the inclusion of qualitative measures, in a mixed method design.

This study has two stages. Stage 1, based in the literature, identifies and develops an OE intervention that is considered appropriate for developing resilience. Stage 2 investigates, in a quasi-experimental design, any change in resilience in school children who experience the developed OE program through quantitative measures, and the aspects of a program considered potent through qualitative measures.

This presentation will explore the work done in Stage 1, and the preliminary data collected. The findings aim to benefit both OE centres who can tailor OE programs to build resilience, and the young people who participate in them.

References

- Hunter, C. (2012). Is resilience still a useful concept when writing with children and young people? *Australian Institute of Family Studies*, 2, 1-11.
- Liebenberg, L., & Ungar, M. (2009). *Researching resilience*. Toronto: University of Toronto Press.

Biographies

Heather Grenon is a part time PhD student and full time lecturer in outdoor and environmental education (OEE) at Federation University Australia. Her passion is exploring aspects of OEE programs that can contribute to the wellbeing of the people who participate in these programs, as well as inspiring university students to lead young people in developing relationships with the natural world.

Peter Martin is an Associate Professor and long-term contributor to the research world of outdoor and environmental education, also from Federation University Australia. His research primarily focuses on human-nature relationships and the role of OEE in schools. He is Heather's PhD supervisor.

A qualitative study of the perceived significant life outcomes of a university winter outdoor education course.

Jennifer Wigglesworth

Queen's University, Canada

Paul Heintzman

University of Ottawa, Canada

This qualitative study, part of a larger project, investigated the life significance of a winter, bilingual (French/English), outdoor education (OE) course offered by a Canadian university from the mid-1970s until 2009. Little research exists on either winter OE programs (e.g., Svoboda et al., 2015) or the life significance of OE programs (e.g., Daniel, 2007). The current study involved in-depth interviews with a purposive intensity sample of 15 alumni who had taken one of the university's winter OE courses more than 20 years earlier. Interpretive analysis of interview data found the following significant life impacts of the winter course: development of interpersonal/social skills, self-discovery, environmental impacts, leisure style change, transfers to others, and advancing outdoor knowledge/skills. The researcher used "how" and "why" questions to probe for processes linking the winter OE course experiences and activities with significant life impacts. The processes identified included: personal growth opportunities (personal challenge/accomplishments, personal reflection, outside comfort zone), group experience, new or different experience, and toughness of climate/weather. While these processes overlapped with processes identified in another study in the larger project that focused on a summer university OE course, the last two processes were unique to the winter OE course. Most participants expressed feeling one or more significant life impacts as a result of participating in the winter OE course. However, for a few students, the OE course was not a Significant Life Experience. With this group of respondents, the course confirmed already-held beliefs, rather than acting as a turning point in their lives.

References

- Daniel, B. (2007). The life significance of a spiritually oriented, outward bound-type wilderness expedition. *Journal of Experiential Education*, 2(3), 386-389.
- Svoboda, J., Dvořáčková, A., Jirásková, M., Bolcková, M., & Majewská, P. (2015). Winter course experience: Toward a wider understanding of a dramaturgy approach. *Acta Gymnica*. doi: 10.5507/ag.2015.020.

Biographies

Jennifer Wigglesworth researched the life significance of university-level outdoor education courses in her Master's at the University of Ottawa. As a current PhD candidate at Queen's University, she studies embodiment in outdoor recreation/sports and chairs the Canadian Student Outdoor Education Conference. She enjoys dragonboating, hiking and snowboarding.

Paul Heintzman is a professor of leisure studies, and an affiliated professor in the M.S. in Environmental Sustainability program at the University of Ottawa where he teaches courses on recreation and the environment. Paul has published and supervised students in the areas of wilderness, parks, outdoor recreation, and outdoor education.

A Unique Mega-Review - a novel approach to understanding best practice in the outdoors.

Ian Williams

University of Melbourne, Australia

Lauren Rose

University of Melbourne, Australia

Michelle Tollit

Murdoch Childrens Research Institute

What can half a million research papers tell us about how to run an effective outdoor program? Our team undertook a systematic review, searching for quality research articles based on specified search criteria (including recency, reporting of empirical outcomes, large sample size, robust research design). Importantly, the papers sourced were not *about* camps and outdoor programs; instead we located over 500,000 articles from fields as diverse as education, psychology, corporate management and sports physiology, each providing valuable insights into what we believe are *key elements* of effective outdoor programs.

While numerous previous reviews have reported on *outcomes* of camping programs (i.e. benefits to participants) this study focuses on *key ingredients* common to good outdoor programs (i.e. mechanisms, processes and components). For example, there is overwhelming research support for links between physical activity and improved emotional wellbeing. Given that most camp programs include elements of physical activity, we might reasonably expect that these same benefits will be present in outdoor programs. Similar types of evidence exist in the research literature for other key components of outdoor programs, including benefits associated with social connectedness, contact with nature, engagement with challenge, and reflective learning.

In spite the insights available through this rich literature, to date it remains largely unknown and relatively inaccessible to the outdoors sector. Much of this literature lies *outside* the outdoor adventure and camps domain. In this session we will summarise evidence from a vast body of literature about the important ingredients of effective outdoor programs in promoting positive youth development. This session will be of interest to camp operators, researchers, program providers, group leaders and outdoor education teachers wishing to learn more about effective practice in the outdoors.

Biographies

Dr. Ian Williams is a Postdoctoral Research Fellow at the Centre for Adolescent Health, Murdoch Children's Research Institute, in Melbourne. He currently coordinates a collaborative research program investigating health and wellbeing benefits associated with youth participation in outdoor camps and nature-based programs through the Outdoor Youth Programs Research Alliance (OYPRA).

Dr. Lauren Rose currently works at the Melbourne School of Psychological Sciences (University of Melbourne) as a Study-Coordinator/Research Fellow with the Outdoor Youth Programs Research Alliance (OYPRA) supporting research into the benefits of outdoor adventure and camping programs for young people.

Dr. Michelle Tollit is a Postdoctoral Research Officer at the Murdoch Childrens Research Institute and RCH Centre for Adolescent Health. Michelle has a Masters in Educational Psychology and a PhD through The University of Melbourne. With over 12 years of research experience, Michelle has strong research interests in adolescent health and wellbeing.

Aboriginal Education's Influence on Canadian Forest School Programming.

Zabe MacEachren

Queens University, Canada

In Canada, Aboriginal cultures have contributed experiences central to many outdoor practices; for instance, the preferred use of the canoe for travel in Canadian Shield terrain. Unfortunately the removal of Native children from their communities to attend residential schools severed the mentoring relationship of many young aboriginal children from their parents and elders, limiting direct experience of place-based activities and the corresponding transfer of knowledge. Through an examination of archival photos, journals and conversation with Natives (many of who did not attend residential schools) data was collected and used to aid conversations going on with forest school practitioners in Canada to ascertain and reclaim curriculum and skills that are specific to the Canadian landscape. Our research is exploring how heritage and specific places can influence outdoor practices.

The presentation will critically examine the degree child-centered and play-based learning is emphasized in forest school programs, in light of what is known of traditional First Nation educational practices and their preference for practical role-modeling of work and problem solving in the field. Interviews were conducted with educators attending Forest School Canada's pilot practitioner's course and later compared to traditional Native education cultural practices.

Some examples from First Nation practices which will be discussed are; the forms and structures young children were exposed to (E.g. canoes, snowshoes & shelters), the role cradle boards played in developing sensory awareness and self-control for hunting, and the importance of young children witnessing adults involved in physically demanding outdoor tasks, which differ greatly from indoor work spaces.

Biography

Zabe MacEachren, coordinates the Outdoor & Experiential Education Program in the Faculty of Education at Queen's University. Her work with Forest School Canada combines many her past work experience teaching in remote First Nation communities with her PhD research interests exploring the ways craft making activities serve as a form of environmental education.

After 5 Years: What we have learned about outdoor education, educators, and the students we work with at the Maple Ridge Environmental School

Sean Blenkinsop

Simon Fraser University, Canada

John Telford

University of Edinburgh, Scotland

In September 2011, after three years of planning, the “doors” opened on the Maple Ridge Environmental School. This place and community based public elementary school was created by the school district in partnership with Simon Fraser University and myriad local environmental, First Nations, and other interested groups. It was understood to be a response to the conventional system, an attempt to integrate the natural world much more significantly into educational practice and to explore whether or not a school, the smallest intact cultural unit in the educational system, could be the heart of a deeper cultural change project. As such, this school has never had a building and spends almost every day outdoors no matter the weather. As a research team we have been involved in every step of the school’s development. Given the size of this project there has been a mass of data collected and multiple qualitative methods employed for its examination including, eco-portraiture, developed by us. This presentation will focus on some of the key findings of this work for outdoor educators and researchers. We will begin by sharing some of the student-based results with a particular focus on their relationships to the natural world. Followed by a quick introduction to several challenges we have named (e.g. eco-care, eco-double consciousness, green sheep) that have arisen as a result of these deep relationships. We end by offering suggestions for how outdoor education might help prepare teachers to work in these kinds of innovative, outdoor, and change mandated environments.

Biographies

Sean Blenkinsop is an associate professor in the faculty of education and the semester in dialogue at Simon Fraser University. He has published widely in outdoor, environmental, and experiential educations and spends as much time as he can on trail.

John Telford is a lecturer in outdoor education at the University of Edinburgh. He is Programme Director for MSc Outdoor & Environmental Sustainability Education and MSc Outdoor Education. John’s research interests include the ways that our relationship with the ‘natural’ or more-than-human world is mediated through our socio-cultural values and understandings.

Art and outdoor education: Investigating possibilities for representing lived experience.

Marcus Morse

La Trobe University, Australia

In taking students outdoors to learn it can be tempting to focus on what students are thinking about and how they articulate their experiences. Yet thinking is only a part of how we experience our surrounding environment and there are multiple ways of representing experience. In this session I discuss components of student experience that might be taken-for-granted but which can contribute to learning and meaning making.

I will describe a research project that investigates a 5-day outdoor education / art experience on the Shoalhaven River in Australia that includes canoeing, camping and opportunities for imaginative responses from students to their experience of the river journey. The research involves emergent thematic analysis of artworks, student interviews and researcher observations. Findings are grouped around ideas of paying intimate attention, texture and complexity, art as an expression of experience and the reciprocal nature of the river journey. In considering the project I highlight embodied components of learning, key aspects of the journey that appeared to provide opportunities for meaning making, and ways in which students were able to represent their lived experience of the river. I also consider the findings in light of Erazim Kohak's argument for the importance of perceiving intrinsic worth within our world.

Biography

Dr Marcus Morse is a Senior Lecturer in Outdoor and Environmental Education at La Trobe University, Australia. Marcus' research interests are in the areas of experiential education, phenomenology, meaning making, and peoples' experience of nature.

Assessing the Divide between Humans and the Natural World: Impacts and Effects of Increased Experience in Natural Areas.

Nicholas Schwass

Lakehead University, Canada

Tom G. Potter

Lakehead University, Canada

There is speculation as to whether humans are able to comprehend, appreciate, and protect natural environments when they have received minimal or no exposure to such areas. Current research strongly emphasizes the health benefits of receiving more exposure to nature, especially since much of North America has witnessed a dramatic shift towards a more technologically driven culture that is heavily reliant on the urban environment.

This study investigates the declining connections between humans and the natural world, and the effect nature-based experience has on individual perspectives regarding stewardship and environmental awareness. Utilizing qualitative research methods, interviews were conducted with nine participants of an Outward Bound Canada expedition in order to determine whether the trip had influenced participants' sense of stewardship and/or environmental connectivity.

Results demonstrate a positive correlation between participant exposures to isolated natural environments and an increased sense of environmental commitment or stewardship, especially with regard to forming connections with nature, willingness to participate in environmental-based volunteer initiatives, and mitigating fear of the outdoors.

Biographies

Nicholas Schwass is a Master's candidate in the Environmental Studies program in the School of Outdoor Recreation, Parks and Tourism at Lakehead University in Thunder Bay, Ontario, Canada. His research interests bifurcate between environmental pedagogy and discovering factors that create natural connections; foster stewardship, and create a love of place.

Tom G. Potter, PhD is an Associate Professor in the School of Outdoor Recreation, Parks and Tourism at Lakehead University in Thunder Bay, Ontario, Canada. His teaching and research interests blend to include the pedagogy of outdoor education, outdoor leadership, risk management, transportation safety and nature-based therapy.

Attunement: Essential in Developing Quality Reflection in Teacher Education.

Andrew Foran

St. Francis Xavier University, Canada

Merleau-Ponty, in *The Sorbonne Lectures 1949-1952*, affirms the continuous need for pedagogical reflection that reveals the adults' views of a child. Van Manen (1991) teaches us that pedagogical reflection allows an adult to be in a moment of relational understanding with young people. For teachers, this special way to reflect is a demonstration of a pedagogical attitude that presents moments, as potentially significant encounters for youth development. The phenomenological data, gathered from GO, the Get Outside afterschool program, has shown a taken-for-granted-educational dimension—attunement as essential to be alongside pupils—allowing middle school teachers to meaningfully reflect on the concreteness of a moment, the outside encounter with a young person. Heidegger (2001) claims attunement is realized only by *being* with others; being in their presence *fully*. Pedagogical practice in teacher education reminds educators this is a tactful expectation for adults to be *fully there* for their pupils. In this presentation, I explore attunement as a starting point in being present for young people and the bases for outdoor educational reflection. Attunement, if pedagogically positioned, reveals deeper, richer teacher understandings of the relational bond that has become deemphasized in current teacher education programs in favor of more technical, cognitive, or behaviorist driven educational models. The research findings explores binding moments in teacher-student relationships, experienced in the GO program, revealing the need for attunement in outdoor practices, for pedagogy, the relationality in leading children, to be even possible.

References

- Heidegger, M. (2001). *Zollikon seminars*. Evanston, Illinois: Northwestern University Press.
- Merleau-Ponty, M. (2010). *Child psychology and pedagogy: The Sorbonne lectures 1949-1952*. Evanston, Illinois: Northwestern University Press.
- Van Manen, M. (1991). *The tact of teaching: The meaning of pedagogical thoughtfulness*. New York: State University of New York Press.

Biography

The focus of **Andrew Foran's** teacher education practice and research is outdoor education in public-school programs. He has developed numerous teacher education programs, workshops, and courses, and has published nationally and internationally. He is leading a certificate program in outdoor education for teachers P-12, through St. Francis Xavier University.

Aventura 92 - Ruta Quetzal: 30 years of educational expeditions.

Vicente F. Gómez Encinas

Universidad Politécnica de Madrid, Spain

Lázaro Mediavilla Saldaña

Universidad Politécnica de Madrid, Spain

Aventura 92 - Ruta Quetzal is an educational, tourism, and sports program that has reached more than 10,000 young people over its 30 years of existence. The program is a combination of adventure with an educational spirit and has made it possible to create a unique developmental environment for participants. The Ruta BBVA (new name) program is carried out for 45 days in three different countries, with more than 300 young people per trip between the ages of 16 and 18. In Spain, the program is supported by a bank (BBVA) and together with the university they have created an educational program recognized by the Spanish and international society (UNESCO).

The educational structure is formed through the basic experience of co-existence, focused on participation in recreational and tourism activities that unite the heritage of the three countries (two Latin American countries and Spain) is remembered. For access to the program the participants are required to present a paper with content related to the historical theme of the expedition, which is then evaluated by a university committee, who pick the 300 best among the different creative areas.

Both the impact and transformation of the participants is significant due to the intensity of the activities and the duration, since it involves decontextualizing the participants from a familiar environment to living in tents and traveling for 45 days.

Biographies

Gómez, Vicente. Professor and Head of Nature Activities in the Faculty of Physical Education and Sport Science (INEF) at the Polytechnic University of Madrid, Spain. Impeller of experiential education through Outdoor Learning. Former technical director of the project Adventure 92-Ruta Quetzal during the period 1986-2001.

Mediavilla, Lázaro. Senior lecturer about Outdoor Learning, Nature Sport and Adventure Truism in the Faculty of Physical Education and Sport Science (INEF). Member in the Scientific Council of Access to Mountains for the Spanish Federation of Mountain Sports and Climbing (FEDME). And representative by the National Association of Adventure Tourism (ANET) in the European Learning Syllabus for Outdoor Animators. (ELESA).

Becoming a place-responsive practitioner: Re-conceptualizing outdoor education in the Swedish curriculum.

Jonas Mikael

The Swedish School of Sport and Health Sciences, Sweden

Outdoor learning has in various forms been part of Swedish education for more than 100 years. With the implementation of the renewed Swedish school curriculum in 2011, the role of outdoor education was enhanced, as it became one of three key learning areas that Physical Education and Health (PEH) is build around. The curriculum highlights that historical, cultural, ethical, international and sustainability perspectives should be addressed in all learning areas, including PEH, in which outdoor education is imbedded. However, if outdoor education is to fulfil its visionary potential in addressing these perspectives, then it must come to terms with its current practice and critically rethink the outdoor activity approach so strongly dominating outdoor education practice in Swedish schools today. This paper draws on data from an ongoing collaborative research project with eight PEH teachers in grade 7-9 schools from different parts of Sweden. The aim of the project is to explore innovative approaches in outdoor education based on place-responsive and sustainability perspectives. Data was collected through pre- and post project interviews, workshop reflections and one lesson observation. Findings suggest that what legitimises Swedish school-based outdoor education practice appears to be underpinned by recreational values, rather than educational. Therefore, the teachers in this study found it difficult to turn the vision of the curriculum in to actual teaching. Findings also suggest that place as a conceptual framework, has enabled the teachers to work in different and innovative ways and have them engage more in cross-curricular learning initiatives about the local landscape.

Biography

Jonas Mikael is an outdoor educator at the Swedish School of Sport and Health Sciences. He is currently completing his PhD, which explores outdoor learning from place-responsive perspectives. Jonas is a keen skier and certified ski instructor and has been guiding heliskiing for many years.

Beyond the walls: within the curriculum. Exploring the niche position of place-based outdoor learning for primary schools.

Amanda Lloyd

Western Sydney University, Australia

Son Truong

Western Sydney University, Australia

Tonia Gray

Western Sydney University, Australia

A place-based outdoor learning program was conducted in an Australian Primary School. Each week a Year 1 class completed curriculum lessons in the outdoors with the cross curricula perspectives of sustainability and Indigenous cultures as the specific foci. The playground, local block and nearby bush land became the places for learning.

A mixed-methods case study tracked the academic learning growth and overall wellbeing of the children throughout the study. Standardized test results, interviews, work samples, photographs, video footage and photographs of children's natural constructions were collected. Academic test results showed significant academic learning gains in alignment with curriculum outcomes. When talking to the children and observing their photos, drawings and creations, it was apparent that academic scores were not the only benefit. Connection to nature, creativity, friendships, resilience and the emergence of life skills emerged as definitive learning areas. In summary, a complete spectrum of benefits associated with the place-based outdoor learning program was established.

The case study presented can be used as an example that informs future outdoor learning policy and practice. It's contributes to the evidence required for policy makers and schools to see the importance of learning outside the classroom. This pedagogical model can be delivered by teachers, address curriculum outcomes and align with current policy in schools internationally. It provides clear support for the argument that outdoor learning should be included in primary schools for academic growth and well-being.

Biographies

Amanda Lloyd is a PhD candidate and was a Primary School teacher for 15 years. She has been implementing outdoor learning programs with classes to improve their educational outcomes. Amanda's passion is holistically developing the skills of our children to become active citizens in our world.

Dr. Son Truong is a Lecturer at Western Sydney University. He takes an interdisciplinary approach to his work, which converges around issues of health and wellbeing of children and youth.

Associate Professor **Tonia Gray** is a Senior Researcher at Western Sydney University's Centre for Educational Research. Tonia has been involved in outdoor education for over 30 years as a researcher, practitioner and curriculum developer. In 2014 she received the Australian Award for Excellence in University Teaching for OE teaching excellence.

Camping as curriculum?

Malcolm Nicholson

University of Melbourne, Australia

Curriculum is one of the most commonly used words in discussion and application of education and outdoor education, particularly in Australia with the development and implementation of the Australian Curriculum.

As part of their research for the review of the Australian Curriculum in 2014, the authors found that there were wildly varying conceptions of curriculum, both in Australia and overseas. They suggested that there needed to be commonality of understanding around the notion of curriculum before more curriculum development was undertaken.

So, what is curriculum? Submissions to the Review of the Australian Curriculum revealed that the “majority opinion is that a national curriculum should address content” (p.116). Considering Eisner’s (1984, p. 209) contention that “curriculum resides at the very core of education,” it must represent most of the work of teachers and outdoor educators. Surely the work of teachers and outdoor educators is more than simply delivering content.

This study uses Schwab’s (1973) “commonplaces” as a foundation from which to build a conception of curriculum. Commonplaces are topics, which are considered essential to serious discussion of a particular subject. The study explores the understanding of curriculum of teachers at school camp and teachers at school to see whether there is commonality in their understanding of the notion of curriculum and whether that understanding affects the scope of their work. In light of these findings it considers the question of whether school camping and the outdoor education programs it embodies are curriculum, are part of curriculum or are in fact extra-curricular?

References

- Australian Government (2014). *Review of the Australian curriculum: Final report*. Australian Government. Retrieved 11th April, 2015, from http://docs.education.gov.au/system/files/doc/other/review_of_the_national_curriculum_final_report.pdf
- Eisner, E. (1984). No easy answers: Joseph Schwab’s contribution to curriculum. *Curriculum Inquiry*, 14 (2), 201-210.
- Schwab, J. J. (1973). The practical 3: Translation into curriculum. *The School Review*. 81(4), 501-522. Retrieved 24th January, 2015 from <http://www.jstor.org/stable/1084423>

Biography

Malcolm Nicolson is a leading teacher at Somers School Camp, Victoria, Australia. He is also a Ph.D. candidate in the Graduate School of Education at The University of Melbourne. His research interest centres around curriculum and school camping. He has published “Aims and Experience in Outdoor Education.”

Canada as Place: Exploring Embodied Pedagogies and the Natural World Through Indigenous Literature.

Patrick Byrne

McMaster University, Canada

As outdoor educators, story is a fundamental way in which we engage learners in nature. In the context of OE practice that strives to connect people with nature, the use of land-based Indigenous literature to understand alternative worldviews is a compelling and underutilized approach.

How might literature rooted in Indigenous ways of knowing contribute to the development of “spaces in which environmentalism flourishes” (Kerridge, 2012, p. 12)? How might embodied pedagogies contribute to social and ecological healing? Contending with ecocritic Lawrence Buell’s call for literature to lead us back to the “physical world” (1995, p.11) this paper explores the ecological worldviews present in the works of Anishinaabe-Haudenosaunee scholar Vanessa Watts (2013) whose focus is a re-visioning of capitalist, dualistic, Western ontology. Her proposal of the idea of “Place-Thought” celebrates the agency of all living beings and reasserts the role of humans as just one part of the ecosystem.

Other Indigenous scholars Jeanette Armstrong, Daniel Heath Justice, and Thomas King are at the forefront of this reclamation and reimagining of an inclusive, non-linear worldview that challenges hegemonic discourse and creates space for relational, intersectional, and ecocentric epistemologies. These ways of thinking and being in nature are necessary for a more complete vision of what it means to be outdoor educators, particularly in so-called postcolonial states like Canada, the US, Australia, and New Zealand. In the context of traditional outdoor education, literary methods of research and interpretation are frequently left out, yet they form an important entryway into our understanding of culture, and thus our relationship to nature.

References

- Buell, Lawrence. (1995). *The Environmental Imagination: Thoreau, Nature Writing, and the Formation of American Culture*. Harvard University Press.
- Kerridge, Richard. (2012). Ecocriticism and the Mission of ‘English’. In Greg Garrard (Ed.), *Teaching Ecocriticism and Green Cultural Studies* (pp. 11-23). Palgrave Macmillan UK.
- Watts, Vanessa. (2013). Indigenous Place-Thought and Agency Amongst Humans and Non Humans (First Woman and Sky Woman Go On a European World Tour!). *Decolonization: Indigeneity, Education & Society*, 2(1).

Biography

Patrick Byrne is a sessional instructor and PhD student in English and Cultural Studies at McMaster University in Hamilton, Ontario. After graduating with an MSc. in Outdoor Education from the University of Edinburgh, Patrick has taught the level four course Environmental Education Inquiry at McMaster since 2013.

Challenge Course Research. What's Out There?

Liz Speelman

Georgia College, United States

Challenge courses are used in a wide variety of settings and the challenge course industry is growing and evolving at a rapid rate. It is important that research is conducted in alignment with this growth. While not always easily accessible, there is a significant amount of research that exists that could be used to inform our challenge course practices. We've come a long way from Attarian's (2005) original annotated bibliography and the time has come for the literature to reflect this. A complete systematic review of challenge outcome-based research was conducted. Initially, quantitative studies were collected and assessed for the purpose of conducting an updated meta-analysis of challenge course research. The most recent meta-analysis having been conducted by Gillis & Speelman (2008). Subsequently, a systematic review of literature garnered a wealth of qualitative research on challenge course programming as well. The ultimate goal of the present work, is to create an updated, challenge course research-focused annotated bibliography. This includes additional data about the current state of challenge course research from both a quantitative and qualitative perspective. This review will lead to a better understanding of current outcome-based challenge course research as well as identifying the gaps in the literature. Participants will: (1) be provided with a summary of quantitative and qualitative research that has been collected on challenge courses; (2) discuss the challenges of accessibility to challenge course research; and (3) be invited to provide feedback about the process and its relevance to their work.

References

- Attarian, A. (2005). *The Research and Literature on Challenge Courses: An Annotated Bibliography* (2nd ed.). Retrieved August 15, 2012, from <http://acct.affiniscape.com/displaycommon.cfm?an=1&subarticlenbr=34>.
- Gillis, H.L., & Speelman, E. (2008). Are challenge (ropes) courses an effective tool? A meta-analysis. *Journal of Experiential Education*, 31(2), 111-135.

Biography

Liz Speelman is a Senior Lecturer in the Outdoor Education program and Director of the Outdoor Center at Georgia College in Milledgeville, GA. Her coursework focuses on challenge course programming, facilitation strategies and group development. Her research focuses on outcome-based challenge course programming from both quantitative and qualitative perspectives.

Coastal Kindergartens: From Norway to Greece.

Katerina Pata

Norwegian School of Sport Science, Norway

The purpose of this qualitative research is to explore how the sea and coastal landscape is used in a Norwegian coastal kindergarten for educational purposes. The inspiration of the project came from the English concept of Forest School and the fact that there is no literature concerning an equivalent concept on the coast. In addition, the research findings are considered together with a reflection upon the educational and cultural discourses of the Greek context for a possible transference of a coastal kindergarten concept in Greece. This study answers the following research questions:

- How is the sea and coastal landscape used in a Norwegian coastal kindergarten?
- How can the concept of a coastal kindergarten be transferred to Greece?

This qualitative case study is located within the constructivist paradigm. Data collection occurred during four visits at the kindergarten and included observations, interviews and collection of artifacts.

The main finding was the taken for granted method of using the local landscape during the establishment of the kindergarten. In addition, the coastal landscape is used mostly actively which means viewing the landscape from all its historic, environmental, geographical, social, cultural, aesthetic and seasonal perspectives. The current pedagogical methods that teachers use in Kroken coastal kindergarten are the flexibility regarding following children's interests, the flexibility regarding time limits and structure and the importance of free play. The possible transfer of a 'coastal concept' to the Greek early childhood education was determined to be beneficial since the sea is the core of Greek cultural identity and the pedagogical methods used in Greece resemble the ones in Kroken coastal kindergarten.

The main strength of this research is the fact that it made visible to other cultures, other educational contexts and possibly to the teachers involved, something that in Kroken coastal kindergarten is taken for granted, probably because of the Norwegian cultural identity, the connection with the local landscape in many different ways.

Biography

Katerina Pata, MA Transcultural European Outdoor Studies, is an early years teacher. She is currently developing an outdoor education program in the school she is working.

Crossing Bass Strait: insights from an Everest of the sea

Beau Miles

Monash University, Australia

At an average depth of only 60m, Bass Strait- separating the Australian mainland and Tasmania, is one of the worlds most notorious passages of water. With a windward fetch of some 12,000 kilometers, deep Southern ocean swells sheer into the shallow passageway with unimpeded energy. For expert sea kayakers, making the crossing via a network of islands has become a popular garden route, much like Nepal's Southern flank of Everest. Undertaken as an expedition party of 4-6 members in 2016, this crossing departed in search of what it means to portray an expeditionary experience through the ideas and structures of narrative identity. As a very personal, yet social experience, this expeditionary lens investigates how "... stories about personal experiences are processed, edited, reinterpreted, retold, and subjected to a range of social and discursive influences, as the storyteller gradually develops a broader and more integrative narrative identity" (McAdams & McLean, 2013, p. 235). How, after all, are the triumphs and tribulations of the expeditionary story captured then re-represented in the aftermath? What sound bites, visions and powerful turns of phrase emerge to become the experience? From dream to reflective phase, this paper will explore the initial findings by showcasing and theorizing several mixed media vignettes that represent the grandeur, challenge, commodification and companionship of the expediency experience.

References

McAdams, D., & McLean, K. (2013). Narrative identity. *Current Directions in Psychological Science*, 22(3), 233-238.

Biography

After producing documentaries *The Green Paddle* (2005) *Africa by Kayak* (2010) and *Trials of Miles* (2013), Beau has turned to adventure travel in his backyard. The latest project *The Commute* has him walking, paddling, horse riding and flying 90km to work. Go to www.beaumilesfilm.com for more information. He often wishes his full time job was looking for golf balls.

Cultural Differences of a Canadian and Danish Outdoor Education Experience

Søren Andkjær

University of Southern Denmark, Denmark

Tom G. Potter

Lakehead University, Canada

Outdoor Education in Canada and Friluftsliv in Denmark presumably share many commonalities and differences. In this study we seek to identify and understand these to further our learning of the two traditions. The aim is to enlighten each national way of learning through the outdoors so as to better understand the benefits of each and ultimately strengthen both.

The study is based on a dual-case study including two university academic outdoor education canoe journeys that were dissimilar in duration and landscape. The Canadian journey was two weeks long and took place in a remote backcountry setting, while the Danish journey was of three days in length and took place in the front-country. This study contrasts the two journeys by investigating the importance and meaning of duration and landscape on the students' experiences. Triangulation of methods was used with qualitative focus group interviews and student narratives; empirical material was analysed using content analysis.

Preliminary results show both similarities and differences in the two groups of student experiences according to connection to nature, building social relations and perception of safety/risk. The duration of the journey and the remote and wild landscape apparently played a significant role to the students' connection to nature and place. The duration of the journey seemed to be important to the students' ways of building social relations. Students' perception of safety/risk did not seem to differ between groups and was not related to the duration of the journey nor the character of the landscape.

Biographies

Søren Andkjær, PhD is an Associate Professor at the Institute of Sports Science and Clinical Biomechanics, University of Southern Denmark. Søren is teaching and doing research within Friluftsliv with a special focus on pedagogy, risk and safety, historical and cultural aspects, health and active living.

Tom G. Potter, PhD is an Associate Professor in the School of Outdoor Recreation, Parks and Tourism at Lakehead University in Thunder Bay, Ontario, Canada. His teaching and research interests blend to include the pedagogy of outdoor education, outdoor leadership, risk management, transportation safety and nature-based therapy.

Deep nature connection: Explicit ways of ‘teaching’ through experience.

Heidi Smith

University of Tasmania, Australia

Across the globe, the many cultural forms of ‘outdoor education’ including outdoor education, outdoor recreation, environmental education, friluftsliv, adventure education and wilderness schools have, to varying degrees, identified the importance of ‘nature connection’ as a core goal for outdoor learning. In recent times, a call for a stronger focus on human nature relationships, developing connection to place and nature, and place based pedagogy in outdoor education has been consistent across the outdoor education literature (e.g., Beringer & Martin, 2003; Higgins, 2009; Nicholls & Gray, 2007; Martin, 2005; Wattchow & Brown, 2011). Until now, what has been present in the literature is the need for nature connection and what has been absent, is the how, how to go about explicitly teaching nature connection and the subsequent experiences of educators and students that result. Through an auto ethnographic approach, (recording self-reflections of designing, teaching and reflecting upon the unit of study), this presentation shares one educator’s personal experience of combining the key elements of extraordinary outdoor leadership (Smith, 2011) with deep nature connection models and activities (Young, Haas & McGown, 2010), to design and intentionally teach nature connection to pre-service outdoor education teachers/leaders in one unit of study at the tertiary level. Specifically, successes and challenges experienced by the educator, along with proposed alternatives to future iterations will be shared. The student experiences of this approach will be shared in a separate presentation at the same conference (see Hayward and Smith).

References

- Beringer, A., & Martin, P. (2003). On adventure therapy and the natural worlds: Respecting nature's healing. *Journal of Adventure Education and Outdoor Learning*, 3(1), 29-39.
- Higgins, P. (2009). Into the big wide world: Sustainable experiential education for the 21st Century. *Journal of Experiential Education*, 32(1), 44-60.
- Nicholls, V., & Gray, T. (2007). The role of stillness and quiet when developing human/nature relationships. *Australian Journal of Outdoor Education*, 11(1), 21-28.
- Martin, P. (2005). Human to nature relationships through outdoor education. In T. J. Dickson, T. Gray & B. Hallyar (Eds.), *Outdoor and experiential learning: Views from the top* (pp. 28-52). Dunedin, NZ: Otago University Press.
- Smith, H. A. (2011). *Extraordinary outdoor leaders: An Australian case study*. (Doctor of Philosophy), University of Wollongong.

Wattchow, B., & Brown, M. (2011). *A pedagogy of place: Outdoor education for a changing world*. Clayton, Vic: Monash University Publishing.

Young, J., Haas, E., & McGown, E. (2010). *Coyote's guide to connecting with nature* (2nd ed.). Navarro, CA: OwlLink Media.

Biography

Heidi Smith is Lecturer in outdoor learning and teacher education professional studies and Course Coordinator of the Bachelor of Education Primary and Associate Degree Education Support at the University of Tasmania. Her research interests include outdoor learning, leadership, nature connection and improving quality of learning and teaching practice incorporating 21st Century Learning and ePortfolios.

Defining Moments: Women's contribution to outdoor education leadership and an examination of the gender divide.

Tonia Gray

Western Sydney University, Australia

Sandy Allen-Craig

Australian Catholic University, Australia

Denise Mitten

Prescott College, United States

TA Loeffler

Memorial University of Newfoundland, Canada

Cathryn Carpenter

Victoria University, Canada

Throughout our collective experiences in the outdoors, defining moments have helped ignite innovation and provided inspiration for women and men in the outdoor profession. Women comprise around half the outdoor education industry however our representation is disproportionately low among the ranks of the senior leaders and researchers in the field.

It would seem that women in the outdoor profession today still face challenges being recognized and accessing the upper echelons of the profession and academy. A recent incident at the 2013 6th International Outdoor Education Research Conference in which women went unrecognized has provided impetus for our workshop. Admittedly, significant progress has been made in the past three decades, however we will shed a spotlight on the imbalance, which exists today.

A panel of inspiring senior women will share their own leadership journeys from across the globe. Having navigated their way through the unique outdoor environment maze, they will provide insight and personal stories about defining moments within their careers. By reflecting on those sometimes unexpected, sometimes tiny, turning points that can become both career and life defining moments, our panel hopes to illuminate the inequities and offer positive ways to move forward. A grounded theory methodological framework underpins the professional narratives and personal reflections that have shaped defining moments in our career trajectories.

Our profession has at its core the development of leadership and individual potential; it is therefore imperative that we examine this dualism within our profession. The workshop will aim to generate practical solutions and strategies for those grappling with ways to improve their leadership impact and potential and help attain personal career goals.

Biographies

Tonia Gray Ph. D. is a Senior Researcher at Centre for Educational Research WSU. She has been involved in OE for 30+ years as a practitioner, researcher and curriculum developer. In 2014 she received the prestigious Australian Award for Excellence in University Teaching for her work in OE. Tonia is also the past editor of the AJOE and on the review panel for JEE and JAEOL.

Sandy Allen-Craig is the National Coordinator for the Outdoor Leadership and Outdoor Education and is responsible for the curriculum development and program delivery of Outdoor Leadership units across the multi campuses of the Australian Catholic University. She has been awarded an Australian Learning and Teaching Council citation, for outstanding contribution to student learning.

Denise Mitten, Ph.D. internationally recognized for her scholarship in outdoor and environmental pedagogy, ethics, leadership, and gender, understands the paramount importance of spiritual and relational considerations when working with people and the more-than-human world. Starting with the Girl Scouts in the 1960s, Denise has worked in outdoor education for 40+ years.

TA Loeffler Ph.D. is an avid outdoor adventurer, gardener, and photographer who happens to teach and do research in outdoor education at Memorial University of Newfoundland. TA has a reputation at Memorial because her students are more often outside the classroom than inside it, outside the box than in.

Cathryn Carpenter Ph.D. is currently a senior lecturer in youth studies at Victoria University. Cathryn has also contributed to the outdoor profession for 30+ years as an instructor, a teacher and curriculum developer in both secondary and tertiary institutions, and through research. For the past ten years she has been actively involved in the development and articulation of Adventure Therapy nationally and internationally.

Development of an Inter-Sport Collaboration to Support Outdoor Education Opportunities as Defined by the Long Term Athlete Development Model.

John Craig Hudec

Cape Breton University, Canada

This presentation reviews the development and the first year of a two year pilot to initiate cross country ski clubs within the Cape Breton Regional Municipality (CBRM). There is a natural tendency for the use of public golf courses for recreational cross country skiing in the winter months. Three local golf clubs expressed interest in such development to the board of Cross Country Nova Scotia (CCNS). In this pilot, grooming and club development were facilitated by Cross Country Nova Scotia in collaboration with two public golf courses and Cape Breton University. Funding was secured for administration, programming, and equipment from both Nova Scotia Health and Wellness and Sport Nova Scotia. The long term goal of this initiative was to develop two self-sustaining clubs in the CBRM and to have equipment to support both student recreation and academic programs at Cape Breton University. Community outreach extends programming with opportunities such as Youth in Motion and other day programming in CBRM. Inter-sport collaboration, club development, and parental involvement will be considered as factors critical to sustainability of this program. The pilot targeted development of outdoor education opportunities at both ends of the long term athlete development model. Safely stored and maintained equipment for children and adults can be used for programming at the developmental and lifelong levels of the model. Access to groomed trails in addition to backcountry skiing is critical to programs such as Bunnyrabbits, Jackrabbits, Track Attack and Ski SKool, in addition to academic programming at CBU. Each of these are fundamental to the long term athlete development model as developed by Cross Country Canada and to outdoor education opportunities in the local community.

Biography

John Craig Hudec's disciplinary background spans recreation, physical education, kinesiology, and health promotion. In addition to this disciplinary perspective John has significant experience in interdisciplinary health and distance education. John is working within the university and the community at large to promote opportunities for a healthy lifestyle including physical activity. John enjoys spending time outdoors in all seasons.

Development of *udeskole* - a development and research project by the Danish Ministry of Education and Danish Ministry of Environment.

Niels Ejbye Ernst

VIA University College, Denmark

Karen Barfod

VIA University College, Denmark

Peter Bentsen

Health Promotion Research, Denmark

There is a growing interest in the Scandinavian concept, *udeskole*, from teachers, schools and governmental organisations. There has not been formalisation of *udeskole* or economic or political support at a Ministerial level until recently.

In August 2014, a new school reform was initiated in Danish schools. This reform supports variation, motivation, physical activity and education outside the classroom. Following this, the Danish Ministry of Education and the Danish Ministry of Environment, decided to support and develop *udeskole* with app. 10 mio. DKK over three years by launching a large national development, research and demonstration project, “Development of *udeskole*.”

The project will support the new school reform and generate new knowledge about *udeskole* in Denmark. The aim of the project is to generate and disseminate practice-related knowledge about *udeskole*, support a development of *udeskole* and create a basis for a spreading of *udeskole* as a teaching method.

In my presentation, I describe the context and background for the project. How many schools in Denmark are practicing *udeskole* and how do they work with *udeskole*?

I will present the results of the project, including teachers and children’s preferences for *udeskole*. This is examined through quantitative and qualitative methods. I will describe how we train and support the schools and teachers in the project. Finally, I will discuss how *udeskole* has developed from being a bottom-up grassroots movement in Denmark to rapidly being a part of school reform in Danish schools. What kind of possibilities and problems can it lead to?

Biography

Niels Ejbye Ernst is affiliated with VIA University College in Denmark.

Karen Seierøe Barfod, PhD student, senior lecturer, VIA Didactics & Learning, program for Applied Research & Development. Karen is currently engaged with the TEACHOUT project aiming to investigate teaching methods in education outside the classroom.

Peter Bentsen, Senior Researcher, MSc, PhD, Health Promotion Research, Steno Diabetes Center. Peter's research has generally focused on 'people, places and pedagogies' in relation to education and health promotion in the interface between the health, social and human sciences.

Dirty Business? A Feminist Critique of Growing “Healthist” Approaches to Nature and Its Implications in Outdoor and Environmental Education

Erin Cameron

Memorial University, Canada

TA Loeffler

Memorial University, Canada

In this presentation, we explore recent North American marketing efforts (internet and television) that draw attention to nature deficit disorder, by linking it to biomedical narratives and reductionism. These efforts create a site of tension for outdoor and environmental education (OEE) where convoluted meanings about health and bodies have arisen as of late. Arguably well intentioned, these campaigns, which take the form of prescription drug commercials as their base, are yet another example in a growing list of healthist approaches emerging in OEE that require interrogation. Take, for example, the recent article of Russell, Cameron, Socha, and McNinch (2013) who draw attention to how dominant obesity discourse is being perpetuated within OEE, privileging some bodies and oppressing others. Similarly, Newbery (2003) provocatively uses the canoe portage to draw attention to how OEE continues to perpetuate ableist and sexist discourses. To add to this growing body of critical feminist thought in OEE, we thematically unpack these recent marketing campaign efforts to explore how they are perpetuating healthist, sizist, sexist, and classist discourses through the “medicalization of nature” as well as demonizing dirt, food, and bodies (Douglas, 2002). We like, Russell et al. (2013), consider how these marketing campaigns are continuing to turn bodies “into political sites of privilege and oppression through (self) regulation, disciplining, and degradation in mainstream Western society in general and in environmental education in particular” (p. 28). Additionally, by digging deeper into the root messages of these campaigns, we will expose the potentially problematic implications for outdoor educators.

References

- Douglas, M. (2002). *Purity and danger: An analysis of concepts of pollution and taboo* (Routledge classics). New York: Routledge.
- Newbery, L. (2003). Will any/body carry that canoe? A geography of the body, ability, and gender. *Canadian Journal of Environmental Education (CJEE)*, 8(1), 204-216.
- Russell, C., Cameron, E., Socha, T., & McNinch, H. (2013). “Fatties cause global warming”: Fat pedagogy and environmental education. *Canadian Journal of Environmental Education (CJEE)*, 18, 27-45.

Biographies

Erin Cameron Ph.D. explores strategies to reduce weight bias and promote positive body image. She is currently co-editing the *Fat Pedagogy Reader*, a book that draws attention to the need to create safe learning spaces for everybody, regardless of shape and size, to pursue healthy active lives.

TA Loeffler Ph.D. is an avid outdoor adventurer, gardener, and photographer who happens to teach and do research in outdoor education at Memorial University of Newfoundland. TA has a reputation at Memorial because her students are more often outside the classroom than inside it, outside the box than in.

Dis-placing Myself: Decolonizing a Settler Outdoor Environmental Educator.

Emily Root

Cape Breton University, Canada

Indigenous Land is the setting of all outdoor education and recreation in Canada. Indigenous communities across Canada are courageously fighting to protect their Lands for future generations. Many settler Canadian outdoor educators endeavor to work in solidarity with Indigenous communities to disrupt Land-based injustice.

Despite these efforts, settler colonialism remains entrenched in many Euro-western outdoor traditions. For example, the micro-cultures of summer camp and canoe tripping carry legacies of romanticized, historicized, and/or fabricated versions of Indigenous life. Place-based pedagogies in outdoor education also can perpetuate settler colonial logics by generating Euro-western place myths while displacing or erasing Indigenous narratives of the Land. One reason for this is that settler Canadian outdoor educators have often not been taught about resilient Indigenous cultures, shared colonial histories, or our own complicity in contemporary colonialism. I argue that settler outdoor educators need to decolonize ourselves and our praxes in order to shift towards respectful relationships with Indigenous peoples and Lands.

Situated in an Indigenist-decolonizing theoretical framework and guided by auto-ethnographic methodology, this study examines the factors and experiences that facilitate and/or prevent settler Canadians' capacities to shift towards respectful relationality with Indigenous peoples and Land. Employing reflexive narratives as data, analyzed through constructivist grounded theory, I generated a new conceptual model of settler decolonizing.

The findings offer 10 settler moves to respectful relationality that include: Land-based experiences and acknowledgement of Indigenous Land; engagement with resilient Indigeneity and respectful relationships with Indigenous peoples; critically reflexive autobiographical work that accounts honestly for settler legacies, builds connections to one's own cultural heritage, and contends with complexities of settler-displacement; and, responsibility for and action to disrupt ongoing settler-colonialism in Canadian institutions such as education.

Biography

Emily Root, an assistant professor at Cape Breton University, is a settler-Canadian who has recently moved to Unama'ki. Her teaching and research interests include Indigenous-settler relations; Indigenous Land-based pedagogies; self-directed, experiential and community-based outdoor learning; and Scandinavian 'friluftsliv' traditions. Formerly an Outward Bound instructor, Emily remains passionate about spending time in the open air with family and friends.

Djurite/Mt Arapiles and outdoor education: Exploring place-responsive pedagogical opportunities.

Alistair Stewart

La Trobe University, Australia

Peter Holmes

La Trobe University, Australia

Inspired by Gough's (2009) argument that places *become* pedagogical through the various educational activities that might be undertaken, the central research question of this paper is 'what pedagogical opportunities might Djurite/Mt Arapiles afford when conceptualised and encountered in range of ways?'. In recent years place as pedagogical research focus has attracted considerable attention in outdoor education (see for example Brookes, 2002, 2006; Stewart 2004, 2006, 2008; Wattchow, 2008; Wattchow & Brown, 2011). It is our experience that in outdoor education in south-eastern Australia certain places, such as the Murray River or Djurite/Mt Arapiles, are conceptualised by educators through particular activities. In this paper we consider first the place, Djurite/Mt Arapiles, and its pedagogical opportunities, before attending to modes of travel.

Djurite/Mt Arapiles is commonly used site for outdoor education in south-eastern Australia, and is frequently represented in research as a venue to undertake rock climbing and abseiling. However, Djurite/Mt Arapiles is at once a site of cultural significance for indigenous and settlers, a nature conservation reserve, and an art and recreation destination, to name but a few. In this paper we employ a case study method, drawing on historic documents and personal experience, to consider a range of pedagogically opportunities when Djurite/Mt Arapiles is encountered via different philosophical, conceptual and physical perspectives. Although the paper takes a case study approach it will also reflect on implications more broadly for outdoor education of attending to the relationships between place, epistemology and ontology.

References

- Brookes, A. (2002). Gilbert White never came this far south: Naturalist knowledge and the limits of universalist environmental education. *Canadian Journal of Environmental Education*, 7(2), 73-87.
- Brookes, A. (2006). Outdoor activity safety guidelines and unfamiliar environments: A hidden curriculum? *Canadian Journal of Environmental Education*, 11, 195-206.
- Gough, N. (2009). How do places become 'pedagogical'? In M. Somerville, J., K. Power & P. de Carteret (Eds.), *Landscapes and learning: Place studies for a global world* (pp. 155-173). Rotterdam: Sense Publishers.
- Stewart, A. (2004). Decolonising encounters with the Murray River: Building place

- responsive outdoor education. *Australian Journal of Outdoor Education*, 8(2), 46-55.
- Stewart, A. (2006). Seeing the trees and the forest: Attending to Australian natural history as if it mattered. *Australian Journal of Environmental Education*, 22(2), 85-97.
- Stewart, A. (2008). Whose place, whose history? Outdoor environmental education pedagogy as 'reading' the landscape. *Journal of Adventure Education and Outdoor Learning*, 8(2), 79-98.
- Wattchow, B. (2008). Moving on an effortless journey: Paddling, river-places and outdoor education. *Australian Journal of Outdoor Education*, 12(2), 12-23.
- Wattchow, B., & Brown, M. (2011). *A pedagogy of place: Outdoor education for a changing world*. Clayton, Victoria: Monash University Press.

Biographies

Dr. Alistair Stewart is the current Head of Department, Outdoor and Environmental Education, La Trobe University, Bendigo, Australia. His research interests include poststructuralist curriculum inquiry, and place-responsive pedagogy, with particular reference to natural and cultural history.

Peter Holmes is a Lecturer at Outdoor and Environmental Education, La Trobe University, Bendigo, Australia. He has worked in the outdoor education field since 1991. He currently teaches in the areas of rock and alpine environments.

Do Intensity Levels Affect Participants' Feelings of Stress Reduction After an Outdoor Activity?

****Poster****

Roger T. Couture

Laurentian University, Canada

Rashmi Garg

Laurentian University, Canada

Todd Ogryzlo

Laurentian University, Canada

Outdoor leisure activities like gardening, lawn bowling and hikes have long been associated with relaxation and perceived restoration during the activity with lasting benefits. In terms of higher risk events like rock climbing and white water rafting, some studies have suggested greater levels of mental restoration outcomes (Russell, Weimer, Lundberg & Peter, 2015). This study examined the effects of rafting in different river intensities on stress reduction and on general restoration. The sample of 243 participants was divided into four groups (low risk, medium risk, high risk and control). Each group completed a pre, a post, and a 35-day follow-up set of questionnaires. The instruments measured emotional affect, state anxiety, somatic tension, perceived stress reduction and the Perceived Restorativeness Scale. River intensity was measured by river type (flat water, medium whitewater, and high whitewater). After controlling for pre-test differences in the stress-related measures and demographic characteristics, rafters showed a significant increase in positive affect as well as a decrease in state anxiety and somatic tension compared to non-rafters. There were no significant differences among the three river rafting groups on any of the above stress-related measures. Self-selection bias may have been responsible for this finding. Future work needs to examine the personality types who benefit most by low, medium and high risk activities like rafting river trips.

References

Russell, M. S., Widmer, M. A., Lundberg, N., & Ward, P. (2015). Adaptation of an adolescent coping assessment for therapeutic recreation and outdoor adventure settings. *Therapeutic Recreation Journal*, 49(1), 18-34.

Biographies

Dr. Couture is the Founding Dean for the Faculty of Health and the Acting Dean of Education at Laurentian University, Canada. His research interests have addressed age groups from youth to the elderly in topics including psychology (health and wilderness), sensation seeking, well-being, stress management and cognitive thinking strategies.

Rashmi Garg is a professor of emeritus in the Department of Psychology of Laurentian University, Canada. Her expertise is in the area of measurement and experimentation. The research interests are in areas of modeling educational aspirations, career planning and science education.

Todd W. Ogryzlo is an entrepreneur and outdoor enthusiast. Having graduated from the University of Calgary in Alberta, he later completed a Master of Arts in Outdoor Adventure Restoration at Laurentian University in Northern Ontario. His professional career path has led him to e Scheduling in Information Technology and more recently to Object-Oriented Software Design.

Do outdoor programs really enhance wellbeing? Preliminary findings from a world-first study.

Ian Williams

University of Melbourne, Australia

Lauren Rose

University of Melbourne, Australia

Nick Allen

University of Oregon, United States

Craig Olsson

Deakin University, Australia

Paul Dudgeon

University of Melbourne, Australia

George Patton

University of Melbourne, Australia

Despite many years of quality practice and research in the outdoors, many key questions remain largely unanswered. For example, does participation in structured outdoor and nature-based programs promote reliable improvement in resilience, learning and wellbeing? If so, which participants show the greatest benefits? How enduring are these benefits? And what features of outdoor programs are associated with the greatest benefits?

In this session we present preliminary findings from a world-first study examining health and wellbeing being benefits for young people taking part in a purpose-designed outdoor program. Conducted by the Outdoor Youth Programs Research Alliance (OYPRA), with support from the Australian Federal Government, this project involved collaboration between 12 partner organisations across education, health, government, and outdoor industry sectors. The study employed an innovative crossover research design and included a large community sample with matched control groups.

Almost 250 young people were recruited from two state secondary schools in Victoria, Australia to take part in a 7-day outdoor program encompassing both hard-top and journey elements. The program was designed and delivered in accordance with the ChANGeS Framework (Williams, 2009), which highlights key components of effective outdoor programs. Participants completed surveys on five occasions (twice before and three times following camp), with program leaders and classroom teachers also completing supplementary surveys. Participants in the control group completed the same surveys but did not take part in the camp experience. As the first study of its

kind in this area, we anticipate this session will be of interest to both researchers and practitioners internationally.

References

Williams, I.R. (2009). Depression Prevention and Promotion of Emotional Wellbeing in Adolescents Using a Therapeutic Outdoor Adventure Intervention: Development of a Best Practice Model. Unpublished doctoral thesis, Department of Psychology, Faculty of Medicine, Dentistry and Health Sciences, University of Melbourne, Victoria, Australia.

Biographies

Dr. Ian Williams is a Postdoctoral Research Fellow at the Centre for Adolescent Health, Murdoch Children's Research Institute, in Melbourne. He currently coordinates a collaborative research program investigating health and wellbeing benefits associated with youth participation in outdoor camps and nature-based programs through the Outdoor Youth Programs Research Alliance (OYPRA).

Dr. Lauren Rose currently works at the Melbourne School of Psychological Sciences (University of Melbourne) as a Study-Coordinator/Research Fellow with the Outdoor Youth Programs Research Alliance (OYPRA) supporting research into the benefits of outdoor adventure and camping programs for young people.

Professor Nick Allen leads a research program addressing psychological and physiological aspects of vulnerability to depression, especially during adolescence, and the treatment and prevention of depression and related mental health problems. His research also addresses the fundamental bio-behavioural mechanisms underlying the development of affect and social behaviour, and variations amongst both clinical and non-clinical populations.

Professor Craig Olsson holds an Australian Research Council (ARC) Principal Research Fellowship and is Professor/Director of the Centre for Social and Early Emotional Development, School of Psychology, Deakin University. He is a Developmental Psychologist with expertise in lifecourse epidemiology and human genetics.

Dr Paul Dudgeon is a senior lecturer in quantitative psychology at the University of Melbourne, Australia. His research interests are the application of quantitative methods to applied research, with particular interests in structural equation modelling, effect sizes and confidence intervals, and mixture modelling.

Professor George Patton is a Professorial Fellow in Adolescent Health Research at the University of Melbourne and a Senior Principal Research Fellow with Australia's National Health and Medical Research Council (NH&MRC). He is the Chair of a Lancet Commission in Adolescent Health and Well-being that has brought academics, policy

makers and youth advocates from 14 countries together to consider the priority actions for health in 10 to 24-year-olds.

Does Outdoor Education get better with age? A 30-year longitudinal study of the impact of outdoor education upon adolescent participants.

Tonia Gray

Western Sydney University, Australia

In 1985, I taught '*Wilderness Studies*' as a fully accredited School Certificate two-year course to 14- to 15-year-old secondary school students. Thirty years later, I revisited the participants to assess the enduring impact of this teaching modality during their adolescent years. As a participant-researcher, I traced students' journeys into adulthood in an attempt to assess the residual or longitudinal effect of immersive nature experiences upon behaviours, attitudes, skills, values and, ultimately, career choices. Using social media, the project was able to contact more than half of the original twenty-two students, who are now around forty-five years of age. A mixed-methods research design employed both qualitative and quantitative measures. Quantitative data was gathered using an online survey tool, and qualitative data was obtained through in-depth interview with a subset of the participants. Interestingly, some interviewees now have adolescent children currently undertaking *Wilderness Studies* at the same school. Although the research is ongoing, preliminary results indicate that participants invariably argue that their outdoor experiences left a more lasting impression than classroom activities. In addition, a surprisingly large number progressed into careers in outdoor education, environmental stewardship, or closely related activities professions. The results highlight for key stakeholders the long-term significance of including outdoor programs in education, even decades later for participants.

Biography

Tonia Gray Ph. D. is a Senior Researcher at Centre for Educational Research WSU. She has been involved in OE for 30+ years as a practitioner, researcher and curriculum developer. In 2014 she received the prestigious Australian Award for Excellence in University Teaching for her work in OE. Tonia is also the past editor of the AJOE and on the review panel for JEE and JAEOL.

Ecophilosophy Fragments: The importance of Sigmund Kvaloy to Outdoor Education.

Bob Henderson

McMaster University, Canada

Sigmund Kvaloy passed away in May 2014. Two tribute books have since been released. Sigmund's is not a household name in Outdoor Education BUT I will suggest here that it should be. Themes from his work that will be covered include: Life Necessity vs Industrial Growth Societies, complexity versus complication, and variance in value orientation connecting Sigmund to anthropologist Florence Kluckhohn. The outdoor educator/travel guide likely works within the above themes without clear knowledge of the significance of such work. Sigmund's thinking can help see the work of Outdoor Education within a larger sphere of cultivating social change and ecological consciousness.

Biography

Bob Henderson has taught in University settings for more than 30 years. He is author or co-editor of three books on Canadian Travel History and co-editor of two books on Norwegian friluftsliv/ecophilosophy studies.

Effects of a large scale EOtC intervention on pupils' well-being

Mads Bølling

University of Copenhagen, Denmark

Janni Niclasen

University of Copenhagen, Denmark

Glen Nielsen

University of Copenhagen, Denmark

Education Outside the Classroom (EOtC) activities are characterised by teachers making use of the local environment when teaching specific subjects. EOtC is described as involving innovative teaching methods, child-led approaches to problem solving, experimentation, cooperation, physical activity and play.

Self-Determination Theory suggests three basic psychological needs, i.e. competence, autonomy and relatedness. EOtC supports of all these needs. When these needs are satisfied pupils experience more well-being.

There is a lack of clear research-based evidence about the impact of EOtC on pupils' well-being. Therefore, we aim to investigate the effect of EOtC on pupils' general psychological well-being using a quasi-experimental equivalent groups design.

In total, 28 EOtC-classes and 20 non-EOtC parallel classes participated. The EOtC teachers participated in a two day course about the didactics of EOtC and agreed to provide 5 hours of EOtC 1-2 days a week during the schoolyear 2014/15. Non-EOtC teachers were asked to provide lessons as usual. Using the Strengths and Difficulties Questionnaire, data on the pupils (n=918) general psychological well-being was collected at the beginning and end of the schoolyear. The amount and characteristics of the actual EOtC provided in both EOtC and non-EOtC classes was monitored day-to-day throughout the intervention period using an online teacher survey platform.

The influence of EOtC was analyzed by comparing EOtC pupils to control pupils on their well-being scores at the end of the year of EOtC adjusting for the baseline values (from the beginning of the year).

The theoretical foundation, study design and main finding will be presented.

Biographies

Mads Bølling, PhD Student, MA(Ed) in Educational Sociology, Department of Nutrition, Exercise and Sports, University of Copenhagen. Mads is currently engaged with the TEACHOUT project aiming to discover if, how and why Education Outside the Classroom has an impact on pupils' social relations, inclusion, well-being and motivation.

Janni Niclasen, psychologist, PhD, assistant professor in psychology, Department of Psychology, University of Copenhagen, Denmark.

Glen Nielsen, PhD, Assistant professor in social science of sports and exercise, Department of Nutrition, Exercise and Sports, University of Copenhagen.

Encounters with Australian wildlife: Fatalities, myth and outdoor education opportunities.

Alistair Stewart

La Trobe University, Australia

What are the fatality prevention, safety management and pedagogical considerations of encounters with seemingly deadly wildlife? In Australia wildlife such as snakes, spiders, sharks, crocodiles, cassowaries, jellyfish, octopus, and insects (bees, wasps, ants) attract media attention as being deadly and contribute to a sense that the outdoors are a dangerous place. Despite media hype wildlife caused fatalities in Australia are rare, and rarer still in educational settings. Unlike North America, for example, there are no terrestrial (human) predators in Australia. Encounters with Australia snakes, cassowaries, and crocodiles present contrasting safety management concerns and experiential opportunities. In this paper I utilize both personal reflection on experiences with these Australia wildlife and document analysis of historical records and coronial reports to examine fatalities and safety considerations, cultural myths, and their socio-environmental contexts. The paper will consider pedagogical opportunities and safety implications for outdoor education, both Australian and international, of encounters with deadly, and not-so-deadly, wildlife.

Biography

Dr. Alistair Stewart is the current Head of Department, Outdoor and Environmental Education, La Trobe University, Bendigo, Australia. His research interests include poststructuralist curriculum inquiry, and place-responsive pedagogy, with particular reference to natural and cultural history.

Evaluating the benefits of residential outdoor adventure courses: Assessing the implications for improved student retention in Higher Education.

Graham Moger

Liverpool Hope University, England

The study evaluates the contribution of outdoor adventurous residential courses to undergraduate student retention, and in particular those courses undertaken by Liverpool Hope University first year students, during their initial semester.

Research focuses on courses delivered at Plas Caerdeon Outdoor Education Centre. These courses use outdoor and adventurous educational activities to develop teamwork, self-perception and academic goal setting. The bulk of the module delivery is undertaken experientially, with students taking part in small group activity sessions. Outdoor and adventurous activities, along with appropriate reviewing procedures, are used as vehicles to examine a number of themes.

Subjective and until recently, largely anecdotal evidence suggested that students' experiences during residential courses at Plas Caerdeon had a positive effect on student retention. This study statistically analyses data collected from level C students that have taken part in residential courses at Plas Caerdeon during their first semester (n =690).

Participating students were asked to evaluate their experience upon completion of the residential, addressing a number of criteria, grading themselves on a five-point Likert/semantic differential scale: firstly, according to how they felt before coming to Caerdeon and immediately after completing the residential.

Students were asked to address a number of criteria and a non-parametric test was used to test the statistical significance of the differences; before and after the residential.

Analysis of the questionnaires indicated that there was a difference between the two sets of scores (before and after the residential experience) in each of the categories and these results tested for statistically significant differences.

Biography

Graham Moger is Centre Director, Plas Caerdeon (Liverpool Hope University's residential Outdoor Education Centre, North Wales) (1999 - present), and formerly, Education Officer and National Park Ranger, Pembrokeshire Coast National Park. Member of the Association of Heads of Outdoor Education Centres; Union of International Mountain Leader Associations; Institute for Outdoor Learning.

Experiential and community-engaged outdoor learning: The Youth in Motion initiative.

Bettina Callary

Cape Breton University, Canada

Patrick Maher

Cape Breton University, Canada

In this presentation, we discuss experiences of three years of collaborative community-engaged, outdoor, and experiential learning opportunities for students and professors in Sport and Human Kinetics (SPHK) courses at Cape Breton University (CBU). We explore ways in which these opportunities create an impact on student learning and academic teaching in a first-year introductory course, a second-year outdoor leadership course and a third-year adventure programming course. The students were part of an initiative called 'Youth in Motion' (YiM), which brings grade four students to CBU for a half-day of physical activities. YiM is a partnership between CBU, the Cape Breton Victoria Regional School Board, the Cape Breton Health and Recreation Complex, and Health and Wellness Nova Scotia. The university students were responsible for conducting a series of thirty-minute sessions with the children over the course of 14 half-days. Four students from each class, a fourth-year undergraduate teaching assistant, and the two professors involved in YiM were interviewed after the completion of the courses. Interviews were on average 15-30 minutes long and asked a series of questions that delved into the learning experiences of students and faculty involved in this initiative. Results show the ways that YiM influenced student understanding and leadership of developing fundamental movement skills and outdoor programming. Further, they learned unexpected lessons about communication, patience, and they noted that "learning is fun!"

Biographies

Dr. Bettina Callary is an Assistant Professor in the Department of Community Studies, Sport and Human Kinetics at Cape Breton University and holds adjunct status at Dalhousie University and the University of Ottawa. Bettina's research interests include coach education, learning, and development, long term athlete development, qualitative research methods, and student development through experiential learning opportunities. Bettina is also an alpine ski coach with team Nova Scotia.

Dr. Patrick Maher is an Associate Professor and Chair of the Department of Community Studies at Cape Breton University. Pat is a 3M National Teaching Fellow, editor of the Journal of Experiential Education and chairs the research working group of Recreation Nova Scotia's Outdoor Advisory Council.

Exploring artful meanings in outdoor play and learning

Naomi Wright

Plymouth University, England

Jennie Aronsson

Plymouth University, England

Sue Waite

Plymouth University, England

This paper will explore ‘artful meanings’ through art-based methods of eliciting meanings of outdoor play and learning with children and the affordances offered for congruence with the subject of study. It draws on three studies:

1. A practitioner research study, part of the wider *Good from Woods* Big Lottery funded project, which worked to increase the research capacity of woodland activity providers to understand and evidence wellbeing outcomes for their work. Over a period of 18 months, a variety of artful approaches with children visiting a play project in woodland situated in a deprived area of southwest England captured and represented how young people aged 7-15 felt about themselves and their free play there.
2. Another *Good from Woods* project based in a school participating in *the Natural Connections* project that aimed to increase the use of local natural environments for curriculum learning.
3. A study to compare different methods of assessing levels of physical activity in different lessons, including self-report, teacher report, pedometers and accelerometers. Within a self-report questionnaire, children aged 7-8 years drew their impression of lessons and our analysis will illustrate the additional valuable insights that this provided to complement other quantitative methods.

We will reflect how, in the first and second cases, art formed part of ongoing conversations. While the period of data generation in the third study precluded such dialogue to verify and co-construct interpretations, it nevertheless provided glimpses and checks that would otherwise be missed, into how learning situations are perceived by young people.

Biographies

Naomi Wright Wright is an artist and environmentalist, researcher and playwork practitioner. Her current interest is in the effect of playing outdoors on our future connection to the environment. She interprets and explores the visible and invisible boundaries that define our social and ecological interplay.

Jennie Aronsson, a lecturer in Adult Nursing at Plymouth University and public health nurse, has a special interest in outdoor health promotion. She has studied physical activity levels in the school day using accelerometry and compared methods to help us understand how best to support healthy outcomes for schoolchildren.

Sue Waite is a Reader at Plymouth Institute of Education with a longstanding research focus on outdoor learning. She is interested to find out more about how children perceive their learning contexts and specifically what stimulates different outcomes from learning or playing outdoors.

Exploring the 'hidden curriculum' in outdoor adventure education

****Poster****

Nevin J. Harper
Camosun College, Canada

Anthony L. Webster
Camosun College, Canada

Ecological awareness, spirituality, personal growth and development are identified as areas in which outdoor adventure education can influence participants. Outdoor adventure programs do not always promote these objectives explicitly although facilitation of programs often incorporates curriculum and activities which produce outcomes associated with them. This study aimed to identify and articulate impacts across physical, emotional, and social domains of students during a challenging international adventure-based field school. Nineteen students participated in a 3-week expedition in the Andean Mountains of Bolivia, South America. The academic courses explored the effects of altitude on human health and performance and the adventure sport & tourism industry in a developing nation; the expressed and approved curriculum. The field school design optimized student learning through cross-disciplinary curriculum, experiential activity and applied mixed-methods research. Written journal assignments, data from physiological and psychological measures and researcher observations were included in analysis. Findings support the literature suggesting that altering environmental circumstances and applying 'real world conditions' can promote student growth and learning across developmental domains—social, emotional, physical, and spiritual: known potential outcomes to outdoor adventure educators, and hence, the hidden curriculum. Questions of how practitioners promote or articulate our work arose from the study. Propositions for researchers and practice are offered.

Biographies

Nevin J. Harper, PhD is Program Leader of Sport Management at Camosun College, National Research Coordinator for Outward Bound Canada, and Co-Chair of the Adventure Therapy International Committee. His journey from PFD's to PDF's has been an adventure and continues to provide him with new terrain to explore.

Anthony L. Webster, PhD is faculty in Sport and Exercise Education at Camosun College. He teaches exercise physiology and strength and conditioning, is a former sea kayak guide, has a passion for any human powered outdoor pursuits, and is not shy about his preference for paddling over publishing.

Exploring young peoples' attitudes to society after a residential outdoor learning experience.

Colin Wood

University of Worcester, England

This paper looks at young peoples' attitudes to society after a residential outdoor learning experience. Such residential experiences are commonly viewed by primary schools as preparation for the move into secondary schooling. However this paper explores them as value-forming experiences where young people create and participate in small social groups outside of the direct oversight of guardians and teachers, and consequently the research focus is on the social values of young people expressed through their attitudes to society.

The research draws on focus groups and follow-up interviews with 3 groups of primary school children (10-11 years old) who had recently returned from residential outdoor learning experiences in the West of England. Using interpretative phenomenological analysis the research explores their attitudes to society and whether they feel that these changed during or after the residential experience. Their responses are considered through Williams' (2013) model of the outcomes of residential outdoor learning for primary school children, and societal impacts through Beames and Atencio's (2008) ideas of a recursive relationship between outdoor learning and the host communities. The analysis is also informed by Warren's (2014) concern that issues of social justice are commonly overlooked in outdoor education research. Thus this paper explores the development of social values in residential outdoor learning experiences and proposes a recursive relationship with broader societal values.

References

- Beames, S., & Atencio, M. (2008) Building social capital through outdoor education. *Journal of Adventure Education & Outdoor Learning*, 8(2), 99-112.
- Williams, R. (2013) Woven into the fabric of experience: Residential adventure education and complexity. *Journal of Adventure Education & Outdoor Learning*, 13(2), 107-124.

Biography

Colin Wood leads the MA in Outdoor Education at the University of Worcester (UK).

Facilitating School Gardens with Visiting Workshop Educators.

Anjeanette LeMay-Crowtz

Independent Researcher, Canada

Alan Warner

Acadia University, Canada

Liesel Carlsson

Acadia University, Canada

Chaiti Seth

Acadia University, Canada

School garden programs can increase students' environmental awareness and knowledge, enable physically active learning, increase children's connection to school and community, increase children's willingness to try and like fruit and vegetables, and contribute to community food security. They struggle with obstacles including overburdened teachers and curriculum, lack of teacher knowledge, inconsistent volunteers and summer garden maintenance. The majority of schools in the Annapolis Valley list a garden in their top 3 'would like to have's', but few have developed a successful and sustainable garden program. This presentation reports on two action research case studies and makes recommendations for pathways to support gardens utilizing shared external community support.

One pilot project was conducted at a rural public school in partnership with the town's recreation program. Instead of relying on the classroom teachers to take on extra responsibilities, an external educator met school classes at the garden beds on a bi-weekly basis in the spring and fall, and summer recreation leaders and participants weekly, to facilitate food-growing workshops. A second case study involved a private school class traveling to a nearby farm resource centre weekly across the spring. Both observational data and analysis of a focus group of teachers and staff indicated that the programming was perceived as effective and cost-efficient by students, teachers, and principals.

Recommendations are made for pathways to overcoming the obstacles to sustainable garden programs. It concludes that schools should not work in isolation; rather, engagement with their community is essential to sustaining a successful garden-based education program.

Biographies

Anjeanette LeMay-Crowtz is an experiential educator with extensive experience in wilderness teaching and school based student leadership and service programs in North America and South Africa. She is working towards a self-sufficient lifestyle on her small Nova Scotia farm, and is looking for ways in which outdoor education and sustainability education can merge.

Alan Warner is a professor in Community Development and Environmental and Sustainability Studies at Acadia University with experience over many years in the design, leadership and evaluation of outdoor environmental education programs.

Liesel Carlsson is a lecturer in the School of Nutrition at Acadia University where she engages her students in experiential learning in community gardens. Her master's degree focused on the role of school gardens in community food security.

Chaiti Seth is the sustainable food coordinator at Acadia University and has worked as a teacher and farmer, educating children in school gardens in both Canada and India.

From mentoring to training in high-level mountaineering.

Alexandra Albert

TU Darmstadt, Germany

The American alpinist Steve House called his latest book “Training for the New Alpinism”. This book holds the most evident proof of a recent change in the adventure field of mountaineering: It illustrates the transition from ,adventure’ to ,adventure sport’, from ,mentoring’ to ,training’. The transition is regarded as a result of the underlying change in society in this presentation. Industrial modernization lead to functional differentiation of systems such as politics, economics, education and sports. Within the sport system further differentiation took place. As differentiation in alpinism occurred and Alpine Clubs became members of the International Olympic Committee, the ,adventure’ became a sport. From that moment alpinism also differed between mass sport and high performance sport and entered new relationships with the media and the economic system. From that point on mentoring as a well-known method of relationship for development in the outdoors shifted more and more to teaching and professional training as a process for mountaineering development. There are currently six European Mountaineering Expedition squads where Alpine Clubs try to teach and train young alpinists to become high level mountaineers following a detailed educational curriculum. This session looks at the importance of interconnecting society’s systems to its’ environments. It presents results from a theoretically based PhD in progress which deals with the development of how sport structures and the social value of high performance enters in Alpinism through the example of the German Alpine Club by using Niklas Luhmann’s systems theory.

Biography

Alexandra Albert M. A. in cultural sciences, sociology and English. Worked in educational and outdoor tourism for 10 years until 2008. Currently works freelanced as a sport mental coach (focussing on Alpinism and endurance sports) close to Darmstadt where Alexandra is doing her PhD in sport sociology with Prof. Bette at the Technische Universitaet.

Gear banks in Denmark - organization, development and significance.

Vagn Adler Sørensen

Grejbank Fyn, Municipality of Odense, Department for Children and Youth, Denmark

Søren Andkjær

University of Southern Denmark, Denmark

The Gear Banks in Denmark intend to provide and support schools and clubs as well as private persons with relevant gear, advising and instruction to do outdoor activities and journeys in nature (friluftsliv). The Gear Banks are sponsored by the Danish Outdoor Council, which is a NGO, funded by the Danish state owned lottery and betting company.

The Gear Banks have been running for more than 20 years and have developed during this period in numbers and field of work. Today there are 25 Gear Banks with a wide range of equipment, many people involved and many lendings every year.

The presentation will report on an ongoing study on the organisation, development and significance of Gear Banks in Denmark, which has analyzed using statistics from the documented lendings in the period of 2010-2015 as well as qualitative interviews with keypersons from the early period of Gear Banks.

Gear Banks have played a significant role in the development of friluftsliv in Denmark in the period often described as the Third Green Wave. The documented lendings will be discussed in order to give perspective to the development of friluftsliv according to choice of equipment, activity and way of organizing. Easy and affordable access to gear helps promote friluftsliv and get more people out in nature. This can however be problematic and the issue of risk and safety in the organization of the Danish Gear Banks will be discussed.

Biographies

Vagn Adler Sørensen, Educational diploma in Outdoor Education. Manager of Grejbank Fyn (Gear Bank), Outdoor Guide and Outdoor Education Adviser.

Søren Andkjær, PhD is an Associate Professor at the Institute of Sports Science and Clinical Biomechanics, University of Southern Denmark. Søren is teaching and doing research within Friluftsliv with a special focus on pedagogy, risk and safety, historical and cultural aspects, health and active living.

Hooked on Osprey - the role of an “iconic” wildlife species in outdoor education

Fiona Stoddart

University of Cumbria, England

Edward Wilson

Royal Forestry Society, England

Nathan Fox

Forestry Commission Whinlatter Forest, England

Much of the narrative associated with wildlife and habitat conservation has focused on individual, often iconic species. In the United Kingdom one of the most significant wildlife re-introduction success stories has been that of osprey. Although present in several regions since the 1950s, it was not until 2001 that osprey nested in the Lake District National Park, Cumbria, England. The return of osprey, after an absence of 150 years, was a major opportunity to engage park visitors with new outdoor activities and education.

To date, in excess of 1 million visitors have participated in osprey viewing at sites managed by the Lake District Osprey Project. A core feature of the project is an educational program involving the contribution of a team of 100 volunteers. Econometric analysis has demonstrated a net gain to the local economy from osprey eco-tourism of approximately £2M/year. However, there has not yet been a detailed analysis of visitor perceptions of the educational and social value of the osprey project.

This presentation will share the results of a research study based at two osprey viewing sites in the Lake District National Park. Interviews were conducted with approximately 300 visitors and incorporated questions, which pertained to demographic information, lifestyle, well-being, attitudes to nature, as well as the learning experience from interacting with osprey project volunteers. Our findings highlight the role that species conservation can play in stimulating outdoor engagement and education, and as a catalyst for physical activity. We discuss some of the opportunities and challenges associated with sustainable wildlife projects, and identify several policy implications.

Biographies

Fiona Stoddart is the Cluster Lead for Media Arts and the Course Leader for the Wildlife Media BA (Hons) at the University of Cumbria Institute of the Arts, Carlisle. Fiona is a keen walker and cyclist and has been involved with the IOERC series since 1996.

Edward (Ted) Wilson is head of education for the Royal Forestry Society and an adjunct professor with the Faculty of Forestry, University of Toronto. Ted has undertaken a wide range of projects in forestry, and maintains a strong interest in environmental education and research.

Nathan Fox is head of education at the Forestry Commission Whinlatter Forest, near Keswick, Cumbria, England. Nathan has been managing and directing outdoor education programs for over 15 years. He currently leads the Lake District Osprey Project and has worked on the Forestry Commission's National Education and Learning Strategy for England.

How curriculum learning in natural environments becomes embedded: a view through the lens of cultural density.

Sue Waite

Plymouth University, England

Andrew Edwards-Jones

Plymouth University, England

Rowena Passy

Plymouth University, England

Natural Connections, a large-scale demonstration project (Dec 2012- March 2016), was commissioned by the Department for the Environment Food and Rural Affairs, Natural England and Historic England, and led by Plymouth University's Institute of Education with the aim of embedding learning outside the classroom in natural environments. In this presentation, we will discuss, using the theoretical concept of cultural density, qualitative data from case studies of schools involved in the project and reflect upon how the development of outdoor learning is apparently supported or obstructed. Cultural density 'refers to the strength and composition of dispositions to practice and norms of behaviour embedded within places that mediate the possibilities for action of individuals in them' (Waite, 2013: 414). The findings are contextualised by some wider quantitative survey data that demonstrates changes in school practice while qualitative data from case studies and interviews help to unpack some of the processes that led to the aforementioned changes. As a demonstration project, theorising to understand the underlying mechanisms for change is an important aspiration in order to scale up the project and develop better methods of encouraging the uptake of curriculum learning in local natural environments by schools; this study suggests that making institutional habitus more visible is highly instrumental in helping to align the approaches in continuing professional development to address local needs. Awareness of expectations, pressures and the usual way of doing things in the setting is likely to help facilitators to tailor their support more effectively.

References

Waite, S. (2013) 'Knowing your place in the world': how place and culture support and obstruct educational aims. *Cambridge Journal of Education*, 43 (4), 413-434.

Biographies

Sue Waite is a Reader at Plymouth Institute of Education with a longstanding interest in outdoor learning. She has written about cultural density in the Cambridge Journal of Education and a chapter in the forthcoming International Handbook of Outdoor Studies, edited by H. Prince, K. Henderson & B. Humberstone.

Andy Edwards-Jones has multi- and inter-disciplinary research interests, involving themes around pedagogic research, research-informed teaching, undergraduate research, student e-journals and outdoor learning. He has participated in research exploring assessment in outdoor learning, and the [Natural Connections Demonstration Project](#) as a member of the evaluation team.

Rowena Passy is a Research Fellow at Plymouth University, and Evaluation Manager of Natural Connections. With other members of the Natural Connections team, she has written about research methodology and schools' use of natural spaces; she has also published work on school gardens.

How do schools position and profile Outdoor Education to the public through their online presence?

Margie Campbell-Price

University of Otago, New Zealand

A school's website represents how it informs the public about its community, vision and values. Website structure, text and images promote the messages a school wishes to convey about its teaching, learning, achievements and wider school life. This presentation reports on the findings of an interpretive qualitative thematic analysis (Braun & Clarke, 2006) of the representation of Outdoor Education on school websites.

An initial analysis of the websites of nearly one third of secondary schools across New Zealand indicates that for many schools, the visual and textual representations of Outdoor Education reinforce the prevalence of outdoor contexts for learning and as an integral part of school life (Boyes, 2012; Lynch, 2006). This is most evident in the images that appear on the front page of many school websites and suggest a collective identity and togetherness, often set in stunning landscapes.

However, preliminary findings reveal that Outdoor Education is represented in a variety of ways and emerging themes. Some websites convey its traditional role in allowing the development of outdoor skills, personal and interpersonal skills, whereas other schools use the outdoor context for the innovation encouraged in the New Zealand Curriculum (2007). Unsurprisingly, several schools located in or near outstanding natural landscapes closely align their school's values with a strong connection to place and environmental sustainability. In a political context that places schools in competition for student numbers, outdoor education is also portrayed as a point of difference to promote a school's attractiveness for international students, particularly for schools that are located outside of the largest cities. Overall, school websites provide a window into how the outdoors may be positioned for learning, adventure, connecting to place and as a marketing tool.

References

- Boyes, M. (2012). Historical and contemporary trends in outdoor education. In D. Irwin, J. Straker & A. Hill (Eds.), *Outdoor education in Aotearoa New Zealand: A new vision for the twenty first century* (pp26-45). Christchurch, New Zealand: CPIT.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology* 2(3), 77-101.
- Lynch, P. (2006). *Camping in the curriculum*. Lincoln University, New Zealand: PML Publications.
- Ministry of Education, (2007). *The New Zealand Curriculum for English-medium teaching and learning in years 1-13*. Wellington, New Zealand: Learning Media.

Biography

Dr. Margie Campbell-Price, PhD, is a senior lecturer at the University of Otago. Her research interests focus on learning experiences outside the classroom, particularly the justifications, experiences and pedagogies associated with these experiences. She teaches a range of postgraduate courses in initial teacher education, where graduates become secondary school teachers.

Human nature relations through the lens' of three European outdoor education traditions: a case study of a masters programme

Peter Becker

Marburg University, Germany

Martin Lindner

Marburg University, Germany

Chris Loynes

University of Cumbria, England

Kirsti Pedersen Gurholt

Norwegian School of Sport Science, Norway

Travelling, curiosity and the quest for the unknown has been a key-metaphor for personal growth and human development for at least two thousand years. These ideas re-appeared in the late 13th century when students began to go on so-called peregrinations to foreign universities and reached their peak in the 17th century. Today most universities world-wide value transcultural travelling and cooperation in their internationalization strategies. Financially supported by the European Union's education-programme *Erasmus Mundus*, a two-year joint international master's degree entitled *Transcultural European Outdoor Studies* (TEOS) was instigated in the fall of 2011 (www.erasmusmundus-teos.eu). The programme is run collaboratively by Phillips-Universität Marburg, Germany, University of Cumbria, UK, and Norwegian School of Sport Sciences. It is explicitly inspired by the ancient idea of *Peregrinatio Academica*. TEOS allows travelling cohorts of students to spend a semester at each of the universities to explore three main European outdoor traditions in their native contexts: *Erlebnispädagogik*, Outdoor Education and *Friluftsliv*, respectively. The concept of journeying or of being under way underpins most philosophies of outdoor education.

The presentation will examine the findings of our research examining, through a transcultural lens, the histories and practices of outdoor education in our three cultures. The intention is to deepen and discuss how ideas of travelling and transcultural sensitivity are argued and advanced in the aims, curriculum-development, study strategies and comparative research policy within TEOS and, secondly, to discuss the contribution to new understandings of the complexity of human-nature relationships in the increasingly globalizing field of outdoor pedagogies, that TEOS may represent.

Biographies

Peter Becker is emeritus professor at Marburg University.

Martin Lindner is a lecturer with Marburg University and coordinator of the MA Transcultural European Outdoor Studies (TEOS).

Dr. Chris Loynes is reader in Outdoor Studies. He is also an educational advisor in the UK and internationally for universities and experiential education organizations. He is currently the chair of the European Outdoor Education Network. Chris leads TEOS at the University of Cumbria.

Kirsti Pedersen Gurholt is Professor of Friluftsliv in Oslo and leads TEOS in Norway.

Inclusive outdoor learning: Comparing Montréal and Toronto.

Mitchell McLarnon

McGill University, Canada

Building on previous research that reviews social justice and inclusion to outdoor learning (OL; Warren, 2002; 2005; Root, 2010; Rose & Paisley, 2012; McLarnon, 2013), the objective of this project is to describe, analyze and compare access to OL across different social groups (e.g. ethnic minorities, including First Nations, and students from less privileged backgrounds) in Montréal, QC and Toronto, ON. Interestingly, while there are differences between the Canada's largest urban centres (linguistic, cultural, etc.), these locations share similar policy supporting OL (Ontario Ministry of Education, 2011; Ministère de l'Éducation, du Loisir, et du Sport, 2010), and have multicultural populations with several First Nation Schools in close proximity.

By analyzing qualitative and arts based data generated from a comparative case study, this project hopes to advance knowledge on social justice and inclusion in OL. Given that both cities have curricular policy in place supporting OL, I argue that programs ought to be inclusive and accessible to all learners interested in participating.

This project will be the first to measure access and participation to OL in Montréal and Toronto and may provide holistic accounts that support previous literature. Moreover, as the majority of Canadians are living in urban environments (Statistics Canada, 2006), this research could provide pertinent data for policy in Canada's urban areas with regard to OL. Understanding and negotiating barriers to access and participation might also have important implications for future educational policy both in Canada and abroad.

References

- Ministère d'Éducation, Sport et Loisir. (2010). Document de travail: Les adolescents et le plein air, Retrieved from:
http://camps.qc.ca/files/3213/5335/7696/Ados_Plein_Air_-_MELS.pdf
- McLarnon, M. (2013). Inclusive Outdoor Education: Bridging the Gap. *Pathways: Ontario Journal of Outdoor Education*. (25) 3, 18-22.
- Ontario. Ministry of Education. (2011). *Environmental education: Scope and sequence of expectations*. Toronto: Author.
- Root, E. (2010). This land is our land? This land is your land: The decolonizing journeys of white outdoor environmental educators. *Canadian Journal of Environmental Education*, 1(5) 103-119.
- Rose, J., & Paisley, K. (2012). White privilege in experiential education: A critical reflection. *Leisure Sciences*, 34(2), 136-154.
- Statistics Canada. (2006). Census of Population, 2001 and 2006. E-STAT ed. 2008. Ottawa, Ontario.

Warren, K. K. (2002). Preparing the next generation: Social justice in outdoor leadership education and training. *Journal of Experiential Education*, 2(5), 231-238.

Warren, K. K. (2005). A path worth taking: The development of social justice in outdoor experiential education. *Equity and Excellence in Education*, 38(1), 89-99.

Biography

Mitchell McLarnon is a PhD student and sessional lecturer at McGill University. He is on the executive council for the *Canadian Association of Curriculum Studies* and is on the editorial board of *Pathways: The Ontario Journal of Outdoor Education*.

Innovative outdoor fieldwork pedagogies in the higher education sector: Optimising the use of technology.

Glyn Thomas

University of the Sunshine Coast, Australia

Brendon Munge

La Trobe University, Australia

Outdoor fieldwork has been a long-standing pedagogy in the higher education sector across a range of disciplines. Based on a review of the literature, this paper explores the use of outdoor fieldwork in the 21st Century university with particular reference to the way technology contributes to student learning. Research has indicated that fieldwork enhances student engagement, links theory and practice, and assists students with the development of professional expertise. Many of the challenges for outdoor fieldwork such as budget cuts, risk management concerns, and workload demands on staff have been exacerbated by massification pressures in universities such as the growth in student numbers and a more diverse student cohort. The increased use of technology on outdoor field trips both solves and creates problems and technology use in outdoor education has been described as a double-edged sword (Cuthbertson, Socha, & Potter, 2004). It can be difficult for teachers to judge whether the benefits to student learning outcomes created by introducing technology outweigh any negative impacts. Koehler and Mishra's (2009) concept of technological pedagogical content knowledge suggests that teachers need to develop a very specific kind of knowledge to make informed decisions about the use of technology. The substitution, augmentation, modification, redefinition (SAMR) ladder (Puentedura, 2006), can contribute to this teacher knowledge by focusing on how the use of technology can transform student learning rather than just replace, or augment, existing teaching tools and strategies. Some examples of how technology is used at the different levels of the SAMR model in outdoor education are provided.

References

- Cuthbertson, B., Socha, T. L., & Potter, T. G. (2004). The double-edged sword: Critical reflections on traditional and modern technology in outdoor education. *Journal of Adventure Education & Outdoor Learning*, 4(2), 133-144.
- Koehler, M. J., & Mishra, P. (2009). What is technological pedagogical content knowledge. *Contemporary Issues in Technology and Teacher Education*, 9(1), 60-70.
- Puentedura, R. R. (2006). *Transformation, technology, and education*. Retrieved 14 March, 2016, from <http://hipposus.com/resources/tte/>

Biographies

Glyn Thomas is a Senior Lecturer in Outdoor Environmental Education at the University of the Sunshine Coast in Queensland, Australia. He has worked in a range of outdoor education settings for more than 25 years and his current research is focused on facilitation, facilitator education, and signature pedagogies in outdoor education.

Brendon Munge is a lecturer in the Outdoor & Environmental Education Department at La Trobe University. He has recently undertaken his PhD studies with a focus on Fieldwork Pedagogy and the delivery of fieldwork in Higher Education. His primary teaching areas focus on the introduction to outdoor living and travel and extended expeditions.

Journeys in the winter wilderness: An exploration of the traditional winter camping experience

Kyle Clarke

Queen's University, Canada

Traditional winter camping, as a specific form of wilderness camping and travel, has emerged as a distinct recreational activity in North America within the last twenty years. It is a unique outdoor pursuit with practices and philosophies that differ in significant ways from those of accepted contemporary wilderness camping models.

Through this presentation, I will share the results of a phenomenological study designed to examine the traditional winter camping experience from the perspective of the participant. The specific research questions that guided this study were: (a) What are the personal meanings that traditional winter campers attach to their experiences? (b) What factors led to their decision to take up the activity of traditional winter camping? (c) How has participation in traditional winter camping affected changes in their own attitudes towards nature, wilderness travel, personal identity and feelings of self-reliance? and (d) What are the unique learning outcomes that could be achieved by including traditional winter camping activities as part of outdoor education experiences?

Analysis of the data revealed three core themes that were central to the experiences of traditional winter campers. These are: connection to the land, sense of community, and personal empowerment. The findings suggest that participation in traditional winter camping activities may have a potential impact on physical, mental and social well-being, and may help to foster pro-environmental attitudes. This research project also illuminated unique aspects of this activity and participants' experiences. Suggestions for continued research are described, which may provide further insight into this phenomenon.

Biography

Kyle Clarke is a doctoral student within the Faculty of Education at Queen's University in Kingston, Ontario, Canada. He is also the current Editorial Chair for Pathways: The Ontario Journal of Outdoor Education.

Learning ecologically: A relational approach skill development and specialization in fly fishing.

Phil Mullins

University of Northern British Columbia, Canada

Genevieve Huneault

University of Northern British Columbia, Canada

Specializing in an outdoor recreation activity leads to outcomes desired by outdoor educators: attachment to place, support for conservation, and increased environmental attitudes and behaviors. Much of recreation specialization research, however, has been quantitative and directed at management rather than education. This research took an ecological, or relational, and phenomenological theoretical approach to investigate recreational fly fishing in order to better understand and describe the process of specialization. The purpose was to inform pedagogy within outdoor education, so as to encourage these shared outcomes. The researchers used qualitative methods and a collaborative approach to describe levels of specialization in fly fishing in terms of the social, ecological, environmental, and personal relationships involved for participants. The researchers determined each participant's level of specialization in fly fishing (beginner, intermediate, advanced, and expert) using an established survey tool, conducted a semi-structured interview with them, and then held field workshops for participants at each level of specialization. Participants in the field workshops wore video cameras and narrated their perceptions, actions, and emotions while fishing. They were also then asked to critically reflect on their practice and participate in a group discussion about a heuristic model the researchers developed based on existing literature. Thus, fly anglers were given the opportunity 'speak back' to the academic theories and research that attempt to describe their practice. The model was refined through qualitative analysis of interviews, videos, and discussions as well as participant feedback. We present this model and discuss key differences or plateaus of learning, and the implications for outdoor education.

Biographies

Phil Mullins is an Associate Professor in Outdoor Recreation and Tourism Management as well as Natural Resources and Environmental Studies at the University of Northern British Columbia, Canada.

Genevieve Huneault is approaching the end of her Master of Arts degree in Natural Resources and Environmental Studies at the University of Northern British Columbia, Canada.

The Feasibility of Using Heart rate Variability Methods in Winter Wilderness Travel Contexts.

Stephen D. Ritchie

Laurentian University, Canada

Bruce Oddson

Laurentian University, Canada

Nicholas Beckett Brown

Laurentian University, Canada

Dominique Gagnon

Laurentian University, Canada

Sebastien Nault

Laurentian University, Canada

Jim Little

Laurentian University, Canada

This study explored the feasibility of using heart rate variability (HRV) measures and methods in a wilderness travel context over multiple days in the environmental conditions of a Canadian winter. HRV analysis assesses variation in autonomic cardiac regulation, and this can be extrapolated to determine cardiovascular health as well as a host of derived outcome variables such as psychological and physiological stress. HRV data was collected from the same participant and author (SR) over three consecutive years (2011-13) for three weeks each year. During the data collection period, the participant completed a rigorous extended winter wilderness snowshoe expedition in the Canadian boreal forest for 7-10 days each year. Thus, there were three similar data sets analyzed in order to compare measurement error rates and outcome variables across the three years and between urban context (pre- and post-trip data; n=35 days) and the winter wilderness context (on-trip; n=25 days). Mean daily measurement error was low across all three years and contexts, and there was not a statistically significant difference in measurement error between the three years and contexts (pre-, on-, and post-trip). Observational trends in the outcome variables indicated large differences in the two contexts (urban vs. wilderness). The consistency of data collection over three years in relatively harsh conditions, with low error rates, indicates that the use of HRV monitors is feasible for research studies in outdoor education and wilderness adventure contexts. For instance, possible outcome variables of interest in these contexts could include heart and respiration rate, energy expenditure, activity type and duration, training effect, recovery, stress and

relaxation. Further limitations and recommendations will be shared for future studies that may consider using HRV measures.

Biographies

Stephen Ritchie is an Associate Professor in the School of Human Kinetics at Laurentian University in Sudbury, Ontario Canada. Stephen is actively involved in a diverse portfolio of research devoted to understanding wilderness, adventure, and outdoor education in the context of achieving personal growth and holistic health outcomes.

Bruce Oddson is an Associate Professor in the School of Human Kinetics at Laurentian University in Sudbury, Ontario Canada. His current research focuses on health, learning, and things that help people flourish.

Nicholas Beckett-Brown is a third year student in a Bachelor of Science in Kinesiology program at Laurentian University in Sudbury, Ontario Canada. Nicholas has a special interest in physiological stress related to exercise in wilderness contexts.

Dominique Gagnon is an Assistant Professor in the School of Human Kinetics at Laurentian University in Sudbury, Ontario Canada. His research program focuses on the thermo-physiological responses of individuals performing physical activity under thermal stress. He has a special interest in the field of cold exposure and its influences on energy metabolism in outdoor adventurers, athletes, and occupational workers.

Sebastien Nault is a Master Lecturer in the Outdoor Adventure Leadership program at Laurentian University in Sudbury, Ontario Canada. His research interests relate to adapting the concepts of Japanese 'shinrin yoku' (forest bathing) within Canadian culture. He is on the advisory board for the Source of Steppe Nomads NGO in Western Mongolia.

Jim Little is the Coordinator of the Outdoor Adventure Leadership Program at Laurentian University in Sudbury, Ontario Canada. Jim has been actively involved in supporting and integrating outdoor-related research with outdoor educational programming since 2006.

Learning Outcomes and Critical Elements of Cross-Cultural Educational Expeditions.

Takako Takano

Waseda University, Japan

Morten Asfeldt

University of Alberta, Canada

Expeditions and journeys have been widely practiced in both formal and informal educational settings for many decades. In recent years, increasing attention has been paid to active learning as well as international learning environment in tertiary education. This research is based on two cross-cultural educational expeditions designed and taught by the authors in 2012 and 2015. The expeditions, both in Canada-one in summer and the other in winter-included students from their respective Canadian and Japanese universities. This study seeks to contribute to the investigation of learning outcomes and critical elements of educational expeditions. Particularly, this study aims to identify unique outcomes of cross-cultural educational expeditions. Group diversity, or cultural aspects of educational expeditions, have been recognized as contributing to learning by Beames (2004), Sheldon (2009) and Takano (2010); otherwise, cultural impacts and aspects of educational expeditions have received scant examination. The data for this study were gathered from the participants immediately prior to, immediately after, and one year following the expedition.

References

- Beames, S. (2004). Critical elements of an expedition experience. *Journal of Adventure Education and Outdoor Learning*, 4(2), 145-158.
- Sheldon, R. (2009). *Rally together: A research study of Raleigh's work with disadvantaged young people*. London: Institute for Public Policy Research.
- Takano, T. (2010). A 20-year retrospective study of the impact of expeditions on Japanese participants. *Journal of Adventure Education and Outdoor Learning*, 10(2), 77-94.

Biographies

Morten Asfeldt has extensive experience as a university teacher and researcher, commercial guide, and outdoor instructor. Designing and leading educational expeditions to the Canadian north is a particular area of expertise. His research interests include pedagogical aspects of educational expeditions, place-based education, history and philosophy of outdoor and experiential education, and leadership development.

Takako Takano is professor at Center for International Education at Waseda University, Tokyo. Her early career was a newspaper writer, and her interests have been interdisciplinary, addressing sustainability, human-nature relationships and traditional knowledge. She has been involved in and led many nature/culture expeditions in places such as the Arctic, Micronesia, and farming communities in Japan.

Liminality, culture and place: a contribution from outdoor education to sustainable development?

Chris Loynes

University of Cumbria, Norway

During the 20th century anglo-western traditions of outdoor education (OE) have emphasized the transformative benefits of wild and unfamiliar land to personal development. It is argued that such places provide a 'liminal' space of new possibilities in which identity can change. Since the 1990's OE has also explored the contribution it is, could and should make to education for sustainable development (SD). The conclusion so far is that it has much to offer with regards to connection to, understanding of, relationships with and action for the environment. More recently OE has embraced the contribution it can make to engaging people in places - place-based education. This paper explores whether the liminal spaces in which personal development can occur could extend beyond environmental outcomes to include the social dimension of (SD).

OE creates less structured 'liminal' spaces in which the voices of participants can be heard. They become actors in the social construction of their norms, values and behaviours. However, whilst this explains how OE can destabilize the power relationships that maintain identity and social norms so allowing personal transformation to take place, up until now the link with environmental norms has not been made.

Recently Waite (2013) and Preston (2014) show how liminal spaces can also include the construction of the place as well as the community of people. In recent action research I hypothesized that including young people in the politics of places whilst destabilizing their current social constructions would allow new meanings linked to SD to emerge. This would be a significant contribution from this field. I will present evidence from two case studies that indicate that, by deterritorialising the experiences from normative OE, taking a values oriented approach to the social and environmental experiences of participants, a different approach to programming and the power relations in the learning community OE can impact significantly on environmental and social outcomes for SD.

References

Preston, L. (2014) Students' imaginings of spaces of learning in Outdoor and Environmental Education. *Journal of Adventure Education and Outdoor Learning*. 14 (2). 172-190.

Waite, S. (2013) 'Knowing your place in the world': how place and culture support and obstruct educational aims. *Cambridge Journal of Education*. 43 (4) pp 413-433.

Biography

Dr. Chris Loynes is reader in Outdoor Studies. He is also an educational advisor in the UK and internationally for universities and experiential education organizations. He is currently the chair of the European Outdoor Education Network.

More than People, Equipment and Environment; the design of a risk assessment method which considers hazards and risks throughout the led outdoor system.

Clare Dallat

University of the Sunshine Coast, Australia

Paul Salmon

University of the Sunshine Coast, Australia

Natassia Goode

University of the Sunshine Coast, Australia

Inadequate risk assessment has been highlighted as a contributing factor in the deaths of participants on school outdoor education programs in Australia and internationally (White; 2014; Salmon et al, 2010; 2012). The current approach to risk assessment within this domain has traditionally focused on hazards and actors within the immediate context of the delivery of the activity; principally those associated with the ‘people, equipment and the environment’. This presentation will discuss the development of a new risk assessment method for the led outdoor activity context. The method, theoretically underpinned by a systems-based model and understanding of accident causation (Rasmussen, 1997), considers hazards and actors beyond those associated solely with the immediate context of the activity. This model of accident causation has been demonstrated to be appropriate for understanding the accidents that occur during led outdoor activities, although it has yet to be applied to the proactive identification of hazards and risks.

References

- Rasmussen, J. (1997). Risk management in a dynamic society: a modelling problem. *Safety Science*, 27(2-3), 183-213. doi:[http://dx.doi.org/10.1016/S0925-7535\(97\)00052-0](http://dx.doi.org/10.1016/S0925-7535(97)00052-0)
- Salmon, P. M., Cornelissen, M., Trotter, M. (2012). Systems-based accident analysis methods: a comparison of Accimap, HFACS, and STAMP. *Safety Science*, 50:4, pp.1158-1170
- Salmon, P. M., Williamson, A., Lenne, M. G., Mitsopoulos, E., & Rudin-Brown, C. M. (2010). Systems-based accident analysis in the led outdoor activity domain: application and evaluation of a risk management framework. *Ergonomics*, 53:8, pp. 927-939.
- White. P. (2014). Coroners Court of Victoria, Finding - Inquest into the death of Kyle William Vassil, COR 2010 0661, State of Victoria, http://www.coronerscourt.vic.gov.au/resources/235cee6c-4ed6-4d07-b62c-c85097d669e3/kylewilliamvassil_066110.pdf.

Biographies

Clare Dallat is a PhD candidate at the Centre for Human Factors and Sociotechnical Systems at the University of the Sunshine Coast. She is Director of Risk Resolve at The Outdoor Education Group in Victoria, Australia; a not-for-profit organization that works with 25,000 participants annually in multi-day outdoor education experiences.

Paul Salmon is Professor in Human Factors and is an Australian Research Council Future Fellow. He is the director of the Centre for Human Factors and Sociotechnical Systems at the University of the Sunshine Coast and chief investigator of the UPLOADS research program.

Dr Natassia Goode is the Organisational Safety Theme Leader within the Centre for Human Factors and Sociotechnical Systems. Natassia's research is concerned with the application of systems theory to enhance accident analysis and injury prevention efforts in safety-critical domains, such as occupational settings, transport and organized outdoor activities.

Moved by Nature? Children's Relations to Significant Outdoor Places

Jan Arvidsen

University of Southern Denmark, Denmark

Children are claimed to have lost connection with the outdoors, and wide-ranging efforts are made to reconnect them with the natural environment. A growing body of evidence substantiates the positive effects of children's interactions with the outdoor environment, and in this light the promotion of children's outdoor play and recreation seems legitimate.

Over the past decade, a variety of facilities, spaces, and landscapes have been built in Denmark to promote children's outdoor recreation. Some studies indicate a mismatch between adult constructs of outdoor places for children and children's own outdoor places. A deeper understanding of children's relations with outdoor places seems crucial when striving to promote children's everyday outdoor activities.

Drawing on the tradition of Children's Geographies, the study aims to investigate children's embodied, spatial, temporal, and relational entanglement with their significant outdoor places. Thus, the study intends to contribute with empirically and theoretically founded critical perspectives to the understanding of children's outdoor recreation in Denmark.

The study is a focused, multi-sited, ethnographical field study, and takes a phenomenological-hermeneutical approach. Using photo-elicited semi-structured interviews and "go-along" participant observation the study investigates two children's groups from a school in Denmark (N=45). The two groups differ in age, being 11-12 and 14-15 years old respectively (5th and 8th grade).

Preliminary results show 1) that children have comprehensive knowledge about their outdoor places, 2) that children engage in a dynamic interplay with their outdoor places, and 3) that many children use their outdoor places as an everyday refuge.

Biography

Jan Arvidsen holds an MA in Philosophy of Education and a BCS in Sports Science. His research revolves partly around human geography in outdoor environments and partly around safety within coastal recreational activities. Jan is teaching a wide range of courses within the field of Outdoor Education.

Natural Clowning: Wayfinding towards Connection and Flow.

Megan Hyslop

Concordia University, Canada

This presentation offers a working idea in my experiential research in Natural Clowning as I search for home, my home, my place, in a socio-ecological culture of connection and flow. Sometimes called “the good life”, this concept is not at all my invention but how I understand the practices of Indigenous cultures, including my ancestral ancient European ones.

Natural Clowning, a blend of deep play, connection with one’s inner world and outer environment, and spontaneous interaction with others, is my research-creation practice: celebrating self-awareness, vulnerability, paradox, failure, and imperfection. It is not only on-stage performance but how I perform my daily life-living acts. Humour comes from sharing parts of myself that I might like to hide in a loving light and from cultivating both a sense of the absurd in challenges and a practice of joy. Performance ethnography is my proposed research methodology.

This study stems from my experience as a wayfinder, or highly sensitive person, my periods of depression and anxiety in response to our ecological crisis, and the empowering benefits I continue to experience from clowning and sensory nature connection.

Biography

Megan Hyslop is an interdisciplinary doctoral student at Concordia University currently living and studying in the beautiful Annapolis Valley in Nova Scotia. Her research interests include clowning, research-creation, land as pedagogy, therapeutic dance/movement, and applied theatre.

Natural Connections: schools' engagement with learning in natural environments.

Sue Waite

Plymouth University, England

Rowena Passy

Plymouth University, England

Martin Gilchrist

Natural England, England

Ian Blackwell

Plymouth University, England

Natural Connections is a model that brings together schools and outdoor learning providers to embed increased use of local green spaces for curriculum learning. The project (Dec 2012- March 2016), was commissioned by the Department for the Environment Food and Rural Affairs, Natural England and Historic England, and led by Plymouth University's Institute of Education. It works predominately in areas of high multiple deprivation with over 130 schools located in 7 "hubs" across southwest England. As a delivery and evaluation project, it gathered evidence to inform future work about how to increase demand from schools for outdoor learning in local green spaces and support them in embedding this in their regular planning and practices.

The evaluation used repeated online surveys supplemented by interviews and 23 case studies. This paper focuses on evidence about schools' levels of engagement. We used the following proxies as indicators of this: teacher and teaching assistant involvement, Continuing Professional Development (CPD) attendance, documentation, funding spent on and structural school ground alterations regarding outdoor learning.

The data reveal variation in the levels and forms of engagement amongst participating schools over time and hub leader interviews suggest some probable reasons for this. It seems that changing schools' learning culture to engage with outdoor learning is a gradual, non-linear process as staff come to understand and experience the benefits for themselves. The implication for outdoor learning development is that sufficient lead time with supported networking to share experience and tailored CPD to address local needs is necessary to build whole-school practice.

Biographies

Sue Waite is a Reader at Plymouth Institute of Education with a longstanding interest in outdoor learning. She is author of many publications in this field including an edited book *Children Learning Outside the Classroom: from birth to eleven*.

Rowena Passy is a Research Fellow at Plymouth University, and Evaluation Manager of Natural Connections. With other members of the Natural Connections team, she has written about research methodology and schools' use of natural spaces; she has also published work on school gardens.

Martin Gilchrist is a lead adviser with Natural England, the UK government's advisory body on the natural environment in England. He has been involved in a range of community-based initiatives to engage people in wildlife. He is currently seconded as a member of the Natural Connections evaluation team.

Ian Blackwell is the Project Manager [Delivery] on the Natural Connections Project. Ian has twenty years' experience in learning outside the classroom settings.

Outdoor adventures for grieving children in a transcultural context.

Therese Oettl

TEOS program/Outward Bound Germany, Germany

Bereavement is theorised in many ways that have cultural as well as theoretical differences (Kuebler-Ross, 2014; Smeding, 2010; Neimeyer, 2012; Wolfelt, 2006). Drawing from my master thesis written for the international program 'Transcultural European Outdoor Studies' I will present my findings of the healing effects of the great outdoors for grieving children. This theoretical and qualitative research will shine light on the similarities and differences between North American and European healing concepts for the bereaved in the context of outdoor activities in terms of a socio-cultural approach by using the method 'Theory of Change'. From this theoretical background, I have introduced a concept for an outdoor adventure week for grieving children, which is developed in cooperation with Outward Bound Germany. Here the core values stand for the right to have fun, the awareness of fellow sufferers and the presentation of the outdoors as a healing place and space. This program is a thought piece at this time and aims to enrich the literature about the healing effects of the great outdoors. In practice, it will be realized first-time in summer 2017 with Outward Bound Germany.

References

- Kübler-Ross, E., & Kessler, D. (2014). *On grief & grieving: Finding the meaning of grief through the five stages of loss* (Scribner trade pbk. ed.). New York: Scribner.
- Neimeyer, R. A. (2012). *Techniques of grief therapy: Creative practices for counseling the bereaved*. The series in death, dying, and bereavement. New York: Routledge.
- Smeding, R. E. W., & Heidkönig-Wilp, M. (2010). *Trauer erschliessen - eine Tafel der Gezeiten* (2., unveränd. Nachdr). Wuppertal: Hospiz Verlag.
- Wolfelt, A. (2006). *Companioning the bereaved: A soulful guide for caregivers*. Fort Collins, Colo.: Companion.

Biography

Therese Oettl is currently studying a master's program called 'Transcultural European Outdoor Studies'. The aim of this program is to experience different concepts of European Outdoor Studies - the British 'Outdoor Education', the Norwegian 'Friluftsliv' and the German 'Erlebnispädagogik' - in a group of 18 international students by living in England, Norway and Germany each a semester.

Outdoor education and emotional support.

Mike Boyes

University of Otago, New Zealand

John Hunter

University of Otago, New Zealand

Shannon McNatty

University of Otago, New Zealand

Positive social interaction is one of the key features of outdoor education. Most outdoor activities are socially constructed with the fostering of interpersonal relationships a prominent objective. In residential situations, opportunities for social interaction abound, from informal conversations to structured activities with social support as part of the curriculum. In this way outdoor education is distinct from other school subjects.

One of the key features of close relationships is giving and receiving emotional support. Residential camp situations provide many opportunities for emotional support to be provided between students, teachers and other adults. Emotional support takes the form of verbal and non-verbal expressions of encouragement, appreciation, reassurance and respect. They lead to care, concern, empathy and interest between people and validate an individual's sense of self. Emotional support is essentially a communicative activity and linked to diverse indices of personal and relational well-being.

Being part of the hidden curriculum of outdoor education, emotional support is prevalent, yet often invisible and elusive. This paper provides empirical support for the following research questions: (1) In an outdoor adventure context, what constitutes emotional support? (2) Who provides it to whom and in what circumstances? (3) What are the outcomes of giving and receiving emotional support? The qualitative data were gathered from teenage children (aged 13-14), and their teachers and adults in a school camp situation using observations, videotape analysis and interviews.

Biographies

Mike Boyes, PhD is an Associate Professor in outdoor education at the School of Physical Education, Sport & Exercise Sciences at the University of Otago, New Zealand. His research areas include teaching and learning in the outdoors, outdoor leadership, and adventure engagement by older people.

John A Hunter PhD is a senior lecturer in the Department of Psychology at the University of Otago. He has published extensively and his research is concerned with the theoretical and practical ramifications of group-based behavior with a focus on intergroup discrimination, health-related outcomes, motivation and socialisation.

Shannon McNatty is a Teaching Fellow in outdoor education at the School of Physical Education, Sport & Exercise Sciences at the University of Otago, New Zealand. Her research areas include girls' personal development and learning in outdoor education and the transition from residential programs back to civilization.

Outdoor Education and Learning Engagement

Tony Robinson

Gilson College, Australia

The engagement of young adolescents in their school-based learning is a challenge for many teachers (Reilly, 2007). In my doctoral research the findings of a case study of the application of Outdoor Education theory into an Experiential Education program for Year 9 students at an Australian suburban school proved to be very successful (Robinson, 2013). Literature relating to three themes were referred to in this research: some of the recently contested areas of OE, such as personal development and transfer of learning; the specific needs of year nine students, out of which an instrument to evaluate year nine programs was developed; and a review of learning engagement literature from which a theoretical framework was derived to interpret the data collected for the study.

In the years following this study further work has been done to improve the program in question based on self-determination theory (Deci and Ryan, 2000) and more recent work on the engagement of adolescents (Belland, Kim and Hannifin, 2013) in the development of a scaffold to assist students to achieve better learning outcomes in inquiry-based learning programs (Low and Robinson, 2015).

References

- Belland, B., Kim, C and Hannafin, M. (2013). A Framework for Designing Scaffolds That Improve Motivation and Cognition. *Educational Psychologist*, 48(4), 243-270, 2013 Published with license by Taylor & Francis.
- Deci, E. and Ryan, R. (2000). The “What” and “Why” of goal pursuits: human needs and self-determination of behaviour. *Psychological Inquiry*, 11(4), 227-268.
- Low, D. and Robinson, T. (2015). A motivation scaffold to improve the learning engagement of students. *Teach Journal of Christian Education*, 9(1), 30-38.
- Reilly, in Crawford, G. (2008). *Differentiation for the adolescent learner: Accommodating brain development, language, literacy, and special needs*. United States of America: Sage Press. (p. vi).
- Robinson, T. 2013. *Experiential Education and Learning Engagement for year Nine Students: A case study*. Unpublished thesis:
<http://www.tonyrobinson.name/PDFFiles/ExperientialEducation&LearningEngagementforYear9Students.pdf>

Biography

Tony Robinson has been teaching secondary school students, primarily years seven to ten, for over 30 years. He has found the application of Outdoor Education theory Experiential Education programs to be one of the best ways for making learning accessible and engaging for young adolescents. His doctoral studies, at La Trobe University, Australia, involved a case study of a wide-ranging experiential education program for Year 9 students focusing on the correlation found from self-reported data of the value of participation in the program and learning engagement. More recently his research focus has shifted to the issue of motivation as addressed by self-determination theory and how this can be applied to the year nine program he is involved in.

Outdoor environmental education research in Australia: tales and trajectories of change (as told in two journals)

Noel Gough

La Trobe University, Australia

Annette Gough

RMIT University, Australia

In 2017 the Outdoor Council of Australia will launch the Journal of Outdoor and Environmental Education (JOEE) to replace the Australian Journal of Outdoor Education (AJOE). This change of title follows deliberations among key stakeholders in outdoor education about the future of publishing in the field and raises a question about the relationships of outdoor and environmental education articulated by Andrew Brookes (1989) more than a decade ago: is outdoor education ‘environmental education re- invented, or environmental education reconceived?’ This paper reviews the histories (and possible future trajectories) of relationships between outdoor and environmental education research in Australia by reviewing manifestations of these relationships in two key journals: AJOE and the Australian Journal of Environmental Education (AJEE). AJEE recently celebrated 30 years of publication, and although AJOE has a shorter history (1995-2016), they share a tendency towards an increasing emphasis on research as they have matured. Brookes (1989) argues that ‘the distinctiveness of outdoor education as a form of environmental education is derived from its physical and conceptual isolation from schooling’ (p. 15) and this paper will examine his proposition by reference to examples of research literature drawn from both journals that attend to the curricular, extra-curricular and school-isolated manifestations of outdoor and environmental education.

References

Brookes, Andrew. (1989). Outdoor education: environmental education re- invented, or environmental education reconceived? *Australian Journal of Environmental Education*, 5, 15-23.

Biographies

Noel Gough is adjunct professor in the School of Education at La Trobe University, Melbourne, Australia, following his recent retirement from the position of Foundation Professor of Outdoor and Environmental Education. He received the inaugural Australian Museum Eureka Prize for environmental education research in 1997 and is a past president (2008) of the Australian Association for Research in Education.

Annette Gough is professor emerita in science and environmental education in the School of Education, RMIT University, Melbourne, Australia. She is a past president (1984-86) and life member of the Australian Association for Environmental Education. Her research interests span environmental, sustainability and science education, research methodologies, posthuman and gender studies.

Outdoor Journeys Bolognese.

Alessandro Bortolotti

University of Bologna, Italy

Simon Beames

University of Edinburgh, Scotland

This presentation details the processes by which learning outside the classroom was incorporated into a primary school in Marano, Italy. First, nascent conceptions of outdoor learning in Italy will be considered, as will the inclusive “for all students” nature of the project. This will be followed by a brief overview of the Outdoor Journeys approach to curriculum-based outdoor learning. A combination of case study and action research was employed to allow a rich mix of data collection sources, such as interviews with teachers, classroom discussions, and ethnographic fieldnotes. Data were then analysed through manual open coding, and verified through member checks with teachers and investigator triangulation with colleagues. The findings suggest that the way teachers structure their outdoor learning sessions (e.g. through timetabling, rhythm of OJ cycles) is central to the programme’s success and failure. The findings also revealed that another key element is the teacher’s role in listening and responding to pupils, as they attempt to create a beneficial for “scholastic mood”. Students also highlighted the importance of concrete, real-world experiences. The findings will be used to inform further in-service teacher-training events, where themes will include choosing appropriate setting for rich outdoor learning experiences; dealing with school districts’ organisational restrictions; integrating outdoor and indoor sites for learning; and inclusive education.

Biographies

Alessandro Bortolotti is an assistant professor in Special Education at the University of Bologna. He is currently writing Italy’s first book on Outdoor Learning.

Simon Beames is a senior lecturer in Outdoor Learning at the University of Edinburgh.

Outdoor learning as a common ground between formal and non-formal education.

Jakob F. Þorsteinsson

University of Iceland, Iceland

Jon Torfi Jónsson

University of Iceland, Iceland

The Department of Education and Youth at the city of Reykjavik, Iceland, has for the last five years been developing the organizational structure between schools and youth centers. This structure can be described as formal and non-formal learning (Stuart, Maynard and Rouncefield, 2015)

This paper takes the concept of formal and non-formal learning within the Icelandic context and seeks to investigate the potential synergies afforded by the nature of the structural changes between schools and youth centers. Two subjects guide the investigation: common ground and opportunity. First, we consider the points of commonality that currently exist between non-formal and formal learning and how they are linked in Iceland. Second, we explore the opportunity for outdoor learning to bridge the gap between these two cultures. We consider how these points of confluence could be developed in terms of further research, policy development and practical support.

The paper will explore an emerging research project where we investigate different perspectives of this ‘synergy’ in relation to the professionals, participants and the systems in which they operate. The study will draw on case studies from a range of contexts available for outdoor learning including day visits, longer visits and then longer residential stays in outdoor centers.

The overarching aim is to provide a deeper understanding of the possibilities that exist for the development of outdoor learning considered from a local perspective and subsequently to develop a recommendation for policymaking for both formal and non-formal education. This would take account of the range of contexts for outdoor learning including those within Reykjavik city and those located further afield.

References

Stuart, K., Maynard, L. and Rouncefield, C. (2015). *Evaluation practice for projects with young people. A guide to creative research*. London: Sage.

Biographies

Jakob Þorsteinsson. MA in Education with emphasis on Outdoor Education. Department chair of Leisure Studies, and a PhD student. His research focuses on formal-, non-formal and informal education, outdoor learning and leisure pedagogy. His research is on the interrelation between formal and non-formal education from the perspective of outdoor learning.

Jón Torfi, professor and a former dean of the School of Education. Recently he asks if education is preparing young students for the future, and then for what future. This calls for a discussion about the role and aims of education, and the boundaries of the system of education.

Outdoor Orientation Programs in Canadian Universities.

****Poster****

Jeffrey McGarry

Laurentian University, Canada

Stephen D. Ritchie

Laurentian University, Canada

Bruce Oddson

Laurentian University, Canada

Tim O'Connell

Brock University, Canada

Outdoor Orientation Programs (OOPs) for universities and colleges are well established, with 191 programs operating in the United States and Canada, as identified by a recent OOPS state of knowledge paper published in 2014. Most of these programs are optional and offered to young students entering college/university life for the first time. The primary purpose of most OOPs is to help first year undergraduate students transition to academic life and help build a sense of belonging. However, less is known about the extent of OOPs at post secondary institutions in Canada. This research aimed to better understand the landscape of OOPs offered at post secondary institutions across Canada. We report the results of a comprehensive literature review and search protocol, to identify existing OOPS in Canada. We used Google Power Searching strategies that were augmented by prior researcher knowledge; programs identified from the literature review; and from the previous OOPS state of knowledge paper. The search criteria for the literature review and search strategy were based on three principles of OOPs derived from the definition used in the 2014 state of knowledge paper: (1) involve small groups; (2) occur in an outdoor or wilderness context for at least one night away from campus; and (3) utilize adventure experiences. We will identify, compare and contrast Canadian findings to those characteristics of OOPs from the 2014 state of knowledge paper, in order to differentiate some of the similarities and differences between Canadian and American OOPs. These findings will also provide a point of reference for future OOPs development at Canadian institutions.

Biographies

Jeffrey McGarry is a licensed Ontario teacher and Sessional Instructor in the Outdoor Adventure Leadership program at Laurentian University in Sudbury, Ontario Canada. Jeff has served many marginalized populations through adventure, and he recently launched a program, Connect Adventures, as an educational organization dedicated to reducing barriers for people participating in the outdoors.

Stephen Ritchie is an Associate Professor in the School of Human Kinetics at Laurentian University in Sudbury, Ontario Canada. Stephen is actively involved in a diverse portfolio of research devoted to understanding wilderness, adventure, and outdoor education in the context of achieving personal growth and holistic health outcomes.

Bruce Oddson is an Associate Professor in the School of Human Kinetics at Laurentian University in Sudbury, Ontario Canada. His current research focuses on health, learning, and things that help people flourish.

Tim O'Connell is a Professor in the Department of Recreation and Leisure Studies at Brock University, St. Catherine's, Ontario. Tim runs the Brock BaseCamp Outdoor Orientation Program and is the recipient of several teaching and research awards directly relevant to outdoor leadership and outdoor education.

Out-of-classroom learning experiences at Gordonstoun School

Simon Beames

University of Edinburgh, Scotland

Gordonstoun School in Scotland is famously known as the school Kurt Hahn started and the one Prince Charles hated. Since its inception in 1934, much has been made of Gordonstoun's Fire and Life-boat services, and their seamanship and outdoor education programmes, but little in the way of rigorous research on these topics has been conducted. This session presents the findings from a study that the University of Edinburgh was commissioned to undertake by Gordonstoun School. The aim of the research was to examine current students', current students' parents' and alumni's perceived outcomes of the non-academic aspects of required school activities, such as outdoor education, sail training, services, and the arts. A secondary aim is to more deeply understand the critical elements of these out-of-class experiences and the ways in which they influence the students. The study features four main kinds of data collection: surveys with alumni and parents of current students; focus group interviews with current students; on-campus ethnography; and archival analysis. At the time of writing the abstract, the initial survey has been conducted and data is being analyzed from 1183 alumni and 235 parents of current students. At the IOERC conference, an overview of the key findings from all data sources will be presented.

Biography

Simon Beames is a senior lecturer in Outdoor Learning at the University of Edinburgh.

Planning to make the right call: The influence of planning on decision making in outdoor education contexts.

Mike Boyes

University of Otago, New Zealand

Tom G. Potter

Lakehead University, Canada

Søren Andkjaer

University of Southern Denmark, Denmark

Martin Lindner

University of Marburg, Germany

Sound leadership in dynamic outdoor environments relies on effective decision-making. On outdoor journeys in educational contexts, leaders make countless decisions varying from inconsequential to paramount. In addition to decisions made around safety and logistics, leaders contend with social, environmental and pedagogical situations where decisions are made, modeled and practiced. Research suggests that planning underpins recognition of the teachable moment in pedagogical and environmental decisions.

While decision-making has been well researched, little attention has been given to the role of planning. Consequently, this presentation explores the role of planning in predetermining and influencing how outdoor leaders make decisions in the field. We consider planning defined broadly, to include formal and informal meetings prior to a journey, an individual leader's personal preparation, and the on-going consideration of forthcoming events by leaders en route.

Data were obtained from interviews with highly experienced leaders. Cognitive task analyses (CTA) of the interviews generated retrospective verbal protocols of specific decisions. CTA's focused on lived experiences in real world tasks in complex work settings. To provide independent verification and improve confidence in the outcomes, 12 interviews across four countries (New Zealand, Canada, Denmark and Germany) were conducted. We present the initial outcomes from the study and discuss implications for practice.

Biographies

Mike Boyes, PhD is an Associate Professor in outdoor education at the School of Physical Education, Sport & Exercise Sciences at the University of Otago, New Zealand. His research areas include teaching and learning in the outdoors, outdoor leadership, and adventure engagement by older people.

Tom G. Potter, PhD is an Associate Professor in the School of Outdoor Recreation, Parks and Tourism at Lakehead University in Thunder Bay, Ontario, Canada. His teaching and research interests blend to include the pedagogy of outdoor education, outdoor leadership, risk management, transportation safety and nature-based therapy.

Søren Andkjær, PhD is an Associate Professor at the Institute of Sports Science and Clinical Biomechanics, University of Southern Denmark. Søren is teaching and doing research within Friluftsliv with a special focus on pedagogy, risk and safety, historical and cultural aspects, health and active living.

Martin Lindner is a lecturer at the Department of Sport Sciences and Motology at the University of Marburg, Germany. His main areas of interest are in the field of outdoor and adventure education, especially issues concerning journeys and group processes.

Playtime: Developing creativity through outdoor education

Mark Leather

University of St. Mark & St. John, Plymouth, England

In this presentation I argue for a re-conceptualization of “playtime” and the development of playfulness as a useful learning tool to cultivate creativity. “Playful play facilitates creativity¹ - sometimes immediately and sometimes after a considerable delay” (Bateson and Martin, 2012, p.8-9). Teaching at a University the question I address is why we may wish to engage in “playtime” and how might this be achieved. There are two arguments for including “playtime”. Firstly, the neo-liberalist discourse about higher education is concerned with employability and “getting a job”. In this sense, creativity is seen as a graduate employability skill by the Confederation of British Industry (CBI)² who consider the skill of creative thinking as a prime outcome of higher education. This CBI report found that a fifth of employers were not satisfied with graduates’ use of creative thinking. Secondly, there are theoretical and empirical accounts about adult playfulness that describe its relation to positive outcomes including: quality of life, creativity and spontaneity, virtuousness, stress coping and academic achievement. Playfulness also has the potential in serving as a lubricant in social situations and for teamwork in work-related settings. There is a clear relationship between exhibiting playfulness and experiencing positive emotions. In this paper I suggest that outdoor educators engage in “playtime” and I propose a pedagogy of play to do this. However, we need to overcome the Victorian values of our educational past and its cultural association of playtime as childish and frivolous, since, as Proyer and Ruch (2011) argue, playfulness can be seen as an intellectual act, which opposes the view of playfulness in adults as being childish and without any great sense.

References

- Bateson, P. & Martin, P. (2013). *Play, playfulness, creativity and innovation*. Cambridge University Press.
- Proyer R.T. & Ruch, W. (2011). The virtuousness of adult playfulness: the relation of playfulness with strengths of character. *Psychology of Well-Being: Theory, Research and Practice*, 1(4), 1-12. Available from <http://www.psywb.com/content/1/1/4>.

¹ Creativity, the generation of novel actions or thoughts, different from innovation, in which new ways of doing things are implemented and adopted by others

² The Confederation of British Industry is a UK business organisation that is the UK’s premier business lobbying organisation, providing a voice for employers at a national and international level.

Biography

Dr. Mark Leather is a senior lecturer in adventure education and outdoor learning at the University of St Mark & St John, Plymouth, UK, where he teaches on undergraduate and post-graduate programmes that utilise the outdoors and an experiential pedagogy. He enjoys connecting with people, places and the planet, on or near water, especially the sea.

Practical Tips for Conducting Research in the Outdoors.

Ian Williams

University of Melbourne, Australia

Lauren Rose

University of Melbourne, Australia

There is increasing demand for outdoor program providers to demonstrate that their camps and outdoor programs are effective. With growing calls for evidence-based practice, many organisations are looking for ways to document the benefits of their programs. However, conducting research in the outdoors is full of challenges: What kind of research methods work best? How do you select quality survey questions? Are quantitative or qualitative approaches better? How do you make sense of the data you collect?

Presented by lead researchers from the Outdoor Youth Programs Research Alliance (OYPRA), this interactive workshop will focus on practical strategies for conducting effective evaluations of outdoor programs. The session will cover four key areas:

- i) Developing a suitable research question
- ii) Exploring appropriate research methods (quantitative vs qualitative; innovative and effective research designs)
- iii) Data collection & questionnaire selection (psychometrics - reliability, validity, normative data)
- iv) Survey delivery & data analysis (design; on-line vs hardcopy; timeframes - baseline/follow up)

We will draw on real-world examples from our own research to demonstrate concepts and their application. We will also highlight some of the common pitfalls of undertaking research in the outdoors, and how to avoid them.

This workshop is suited to those wanting to further their understanding of relevant research methods and survey design, and to apply this knowledge to their current practice. Attendees are encouraged to bring their own research questions, challenges and issue for discussion.

Biographies

Dr. Ian Williams is a Postdoctoral Research Fellow at the Centre for Adolescent Health, Murdoch Children's Research Institute, in Melbourne. He currently coordinates a collaborative research program investigating health and wellbeing benefits associated with youth participation in outdoor camps and nature-based programs through the Outdoor Youth Programs Research Alliance (OYPRA).

Dr. Lauren Rose currently works at the Melbourne School of Psychological Sciences (University of Melbourne) as a Study-Coordinator/Research Fellow with the Outdoor Youth Programs Research Alliance (OYPRA) supporting research into the benefits of outdoor adventure and camping programs for young people.

Probing Outdoor Educators' Pedagogical Content Knowledge: Lessons from Tasmania, Australia

Chris Walker

University of Tasmania, Australia

Janet Dymont

University of Tasmania, Australia

Helen Chick

University of Tasmania, Australia

For many educators interested in quality teaching and learning, encountering Shulman's (1987) notion of "pedagogical content knowledge" (PCK) brings a delightful 'aha' moment. It helps us explain something that we are sure exists, and acknowledges the idea that "there really is something special about what I know for teaching my discipline area." The usefulness of PCK has been recognized in a number of 'learning areas', like Mathematics, Science, and Drama, but little, if any, work has been done to under the potential contributions of PCK in the Outdoor Education (OE) learning area. This paper seeks to address this gap in understanding by answering the following inquiry questions:

What content knowledge informs the practice of OE teachers?

What PCK informs the practice of OE teachers?

What are the relationships between OE teachers' content knowledge and PCK?

To answer the inquiry questions, we worked with seven outdoor education teachers who teach a Grade 11 and 12 Outdoor Leadership Curriculum in Tasmania, Australia. Teachers who participated in the study were required to respond to 'classic' OE teaching and learning scenarios and were asked to describe their approaches to teaching a number of content areas in the curriculum document. We analyzed the data to identify the strengths and weaknesses in the PCK of the teachers in this study. Analysis revealed that teachers' content knowledge was generally strong and that they had a profound understanding of OE subject matter. In terms of PCK, however, the teachers were generally less able to articulate a sound reasoning for making their pedagogical decisions, often relying on 'tips and tricks' rather than purposefully chosen teaching strategies.

References

Shulman, L. S. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review*, 52(1), 1-22.

Biographies

Chris Walker is an Honours Researcher in the Faculty of Education at the University of Tasmania. Since working as a freelancer in Canada and Australia, he has re-focused his attention towards researching quality teaching and learning in outdoor education. When not behind to computer, he can be found kayaking, mountain biking, hiking and looking for quiet lakes to canoe in Tasmania and Ontario.

Janet Dymont is a Senior Lecturer and Course Coordinator in the Master of Teaching in the Faculty of Education at the University of Tasmania. Prior to this appointment, she worked at Lakehead University (Canada), Outward Bound, Project DARE and NOLS.

Helen Chick is an Associate Professor and Deputy Head of School in the Faculty of Education at the University of Tasmania. She is interested in mathematics education and has been deeply involved in conceptualizing pedagogical content knowledge of mathematics teachers.

Reconceptualising evidence in outdoor education research.

Kathleen Pleasants

La Trobe University, Australia

In this paper I will discuss the initial stages of my PhD study, which aims to deploy selected feminist and post structural theoretical frameworks to critically interrogate and reconceptualise the notion of research within outdoor education. O'Toole & Beckett (2013, p. 57) discuss the possibilities for research studies to establish 'better theorization, or reasons for practices, than is taken for granted, or presently justified'. Hence through 're-reading' outdoor education research, I seek to produce alternative conceptualisations of outdoor education research, epistemology, pedagogy and curricula. Following this, an intent of this study is to reflect on my own theory and practice situated from within Australian OE.

By framing this research inquiry as praxis I intend to be guided by unsettling methodologies in order to produce research that is a re-examination/reconsideration that disrupts and dislocates what may be taken for granted within the field and beyond, and invites participation from researchers, practitioners and participants alike (Schwandt, 1998).

References

- O'Toole, J., & Beckett, D. (2013). *Educational research: Creative thinking and doing* (2nd ed.). Australia: Oxford University Press.
- Schwandt, T. (1998). The interpretive review of educational matters: Is there any other kind? *Review of Educational Research*, 68(4), 409-412.

Biography

Kathleen Pleasants is a lecturer in the Department of Outdoor & Environmental Education at La Trobe University, in Australia. Her teaching research interests coalesce around OEE curriculum, pedagogy and assessment practices. Kathleen is currently undertaking a PhD in Outdoor & Environmental Education, with a focus on OEE research.

Reimagining Print Literacy through Outdoor Locales: A Crafted Library on a University Campus.

Mitchell McLarnon

McGill University, Canada

Amélie Lemieux

McGill University, Canada

Library books and printed materials have been decreasing over the past decade, especially on university campuses across North America (Price, 2010). Our research addresses the impact of establishing a free library on a Canadian university campus, following the “Little Free Library” (LFL) model developed by Bol (2009) with the intention of finding accessible avenues to literacy learning. Typically, LFL takes the form of wooden boxes located outdoors, on street corners in varying areas of a city.

Given that the LFL is located outdoors, we consider artful literacy implications (Greene, 1995) in the context of outdoor learning. Beames, Nicol and Higgins (2011) argue that varying literacy events can be developed from “experiences and material drawn from nature” (p. 22). As such, learning in local landscapes can enhance learning experiences as this notion involves the “socio-cultural, geophysical, and ecological phenomena” (Beames et al., 2011, p. 18) that shapes where we live, work and play. As a result of investigating the implementation of these outdoor boxes in Villeray and Saint-Henri, working class, family-oriented neighbourhoods in Montreal, Quebec, we (the authors) produced a series of autoethnographic letters (Bocher & Ellis, 2002) that include photography and poetry. Adopting artful and critical stances toward outdoor learning and literacy, we aim to explore learning through a community endeavour.

Through this reflexive research process, this presentation will demonstrate how LFL can contribute to social, cultural and critical dimensions of research and theorizing in outdoor learning through literacy, both in local neighbourhoods, and in a university context.

References

- Bol, T (2009). Little free library: History. Retrieved from <http://littlefreelibrary.org/history/>
- Beames, S., Higgins, P. & Nicol, R. (2011). *Learning outside the classroom: Theory and guidelines for practice*. New York: Routledge.
- Bochner, A. P., & Ellis, C. (2002). *Ethnographically speaking: Autoethnography, literature, and aesthetics*. Landham: Rowman Altamira.
- Greene, M. (1995). *Releasing the imagination: Essays on education, the arts, and social change*. San Francisco: Jossey-Bass Publishers.

Price, G. (2010). New statistics available: IMLS releases new “ public library report”. Library Journal. Retrieved from <http://www.infodocket.com/2013/01/22/new-statistics-available-impls-releases-new-public-library-report-fy-2010/>.

Putnam, R. D. (2001). *Bowling alone: The collapse and revival of American community*. New York: Simon and Schuster.

Biographies

Mitchell McLarnon is a PhD student and sessional lecturer at McGill University. He is on the executive council for the *Canadian Association of Curriculum Studies* and is on the editorial board of *Pathways: The Ontario Journal of Outdoor Education*.

Amélie Lemieux, Ph.D. Candidate (Literacy and Curriculum, McGill), is co-chair of the 2016 Canadian Arts Researchers and Teachers pre-conference and acts as French Liaison for the Language and Literacy Researchers of Canada. Her research focuses on youth’s aesthetic meaning-making and reading reception of literary works in classroom settings.

Seeing what they see. Exploring the potential of GoPro video cameras in outdoor research with children.

Amanda Lloyd

Western Sydney University, Australia

Tonia Gray

Western Sydney University, Australia

Son Truong

Western Sydney University, Australia

In outdoor programs, how can we know what children are really seeing, hearing, doing and touching? Giving young participants a voice in educational research is vital to more authentically understand their perspectives.

An Australian Primary school class completing a place-based outdoor learning program is the context for this research project. The study employed a novel research design where video footage was obtained by children wearing GoPro cameras mounted on their chests. The GoPro video cameras were used within a mixed-method case study to deepen understanding of the experiences of children. They provided first-person visual and audio data from children's viewpoints during events. Additional data collected included observations, standardized curriculum work samples, students' academic results, interviews, student-generated photographs and natural constructions. The footage was analyzed in conjunction with other data sources, including to note deviations between recalled events and the first-person video record.

The following research themes emerged: curriculum and engagement, well-being and making connections to past experiences. These themes provided a framework for analysis. Video technology generated distinctive insights into children's learning experiences, social interactions, focus on activities and connection to nature. This experimental method deepened understanding of the experiences of the children, including facets of the experience that students and teachers struggled to articulate.

This presentation provides examples of how technology was used within a research method where children were positioned and valued as co-researchers. Reports from the children and researcher provide details of the logistical challenges of the first-person video method in the preparation, implementation and analysis phases.

Biographies

Amanda Lloyd is a PhD candidate and was a Primary School teacher for 15 years. She has been implementing outdoor learning programs with classes to improve their educational outcomes. Amanda's passion is holistically developing the skills of our children to become active citizens in our world.

Associate Professor **Tonia Gray** is a Senior Researcher at Western Sydney University's Centre for Educational Research. Tonia has been involved in outdoor education for over 30 years as a researcher, practitioner and curriculum developer. In 2014 she received the Australian Award for Excellence in University Teaching for OE teaching excellence.

Dr. Son Truong is a Lecturer at Western Sydney University. He takes an interdisciplinary approach to his work, which converges around issues of health and wellbeing of children and youth.

Smith's Bush: a case study in Outdoor Philosophy.

Ray Hollingsworth

AUT University, New Zealand

While the benefits of people being in and interacting with nature are well documented (see for example, Roszak, Gomes & Kanner, 1995; Louv, 2008), how do outdoor educators encourage that interaction when people feel they have limited time, and the educators have to teach in an urban environment? Based on Martin's (2004) work on human /nature relationships, a third-year university paper was created (in part) to explore this question. It utilized regular visits to a local bush reserve that was within walking distance, with each visit focused on a different way of interacting with the bush - from identifying the plants to producing a map of signs of human impact to using the bush to explore and enact Cornell's (1998) flow learning approach. Weekly reflections of these visits was required, while weekly readings provoked conversations and provided a background to the students constructing their personal philosophy of interaction with nature. This philosophy was shaped and presented via a portfolio of work. A discourse analysis of the students' portfolios and behavior, revealed that over the course of the paper they transition from 'busyness', pressure and skepticism, into curiosity and relief, and finally into anticipation of pleasure. This case study presents the educators pragmatic exploration of Martin's (2004) work, including whether the students felt they moved through the human /nature development typology: alienated from, travelling through, caring for, and integrated with.

References

- Cornell, J. (1998). *Sharing Nature with Children*. California, USA: Dawn Publications.
- Louv, R. (2005). *Last child in the woods: saving our children from nature-deficit disorder*. Chapel Hill, North Carolina, USA; Algonquin.
- Martin, P. (2004). Outdoor Education for Human/Nature Relationships. Paper presented at : Connections and Disconnections: Examining the reality and rhetoric. International perspectives on outdoor education theory and practice, La Trobe University Bendigo, Australia. Retrieved from <http://www.latrobe.edu.au/education/research/outdoor-and-environmental/resources>
- Rozzak, T., Gomes, M.E., & Kanner, A.D. (1995) (Eds). *Ecopsychology: restoring the earth, healing the mind*. New York, USA; Sierra Club.

Biography

Ray Hollingsworth is a senior lecturer in outdoor education at AUT University. His heart is in the mountains of Fiordland; he ponders how he can possibly make a difference in a world rushing towards collapse; he accepts that he is below the cats in the pecking order of his household.

Social media and the airbrushed outdoor experience: Friend or Foe?

Tonia Gray

Western Sydney University, Australia

Nicole Taylor

University of Wollongong, Australia

Christine Norton

Texas State University, United States

Joelle Breault-Hood

Western Sydney University, Australia

Beth Christie

University of Edinburgh, Scotland

Two recent social media posts³ about the authenticity of women's experiences in the outdoors fueled an outpouring of dialogue among the authors of this paper. These posts sparked healthy debate and we asked ourselves, '*Why does our apparel, our aesthetical appeal, our physicality, or even our motivations become subject to critique and judgment?*' One reason we post about outdoor activities through social media is to remind ourselves that we are strong, vibrant and engaged with life, not simply to declare it to our online audiences. Internet self-presentation reminds us of our motives and deepest values. However, we were troubled by the burgeoning use of social media, services such as Instagram, Twitter and Facebook, to curate a public self through idealized eyes. Social media can create a sense of dependence on these networks, a feeling that posting online about an event is necessary to reinforce a conviction that *the experience happened*, and that *it had meaning*. Three key themes will be analysed: 1) *What are the intrinsic or extrinsic motivations for engaging with nature on social media?* 2) *What's 'in it' for nature?* Is the natural world merely a backdrop, a resource to be commodified? A review of the 'hashtags' on photos in nature offer an insight into patterns of social classification and meaning-making; and 3) *Do gender inequities exist in the reception of photos in nature?* Women's appearance is disproportionately scrutinized in nature-based activities - by both men and women -as if these activities should be judged as magazine photo shoots. As women who have worked in the outdoor industry, the authors believe that these trends in online communication challenge the authority of women's experiences of the outdoors in ways significantly different to men's.

¹ <http://www.tetongravity.com/story/adventure/is-this-real-life-outdoor-women-on-social-media>
<http://www.mymountaintherapy.com/blog/2015/11/6/my-adventure-is-more-real-than-your-adventure>

Biographies

Associate Professor **Tonia Gray** Ph. D. is a Senior Researcher at Centre for Educational Research WSU. She has been involved in OE for 30+ years as a practitioner, researcher and curriculum developer. In 2014 she received the prestigious Australian Award for Excellence in University Teaching for her work in OE. Tonia is also the past editor of the AJOE and on the review panel for JEE and JAEOL.

Nicole Taylor (PhD Candidate) is a sessional lecturer in Outdoor Education and Experiential Learning at the University of Sydney. She is currently completing her PhD at the University of Wollongong, investigating the potentiality for 'environmental health' in the Australian subject area Health & Physical Education (HPE).

Christine Norton is an Associate Professor of Social Work at Texas State University, USA. She has over 20+ years combined as a social work practitioner, researcher and educator in wilderness and adventure therapy. She is a Research Scientist with the Outdoor Behavioral Healthcare Research Center, former Chair of the Association for Experiential Education's Therapeutic Adventure Professional Group, and an active member in the International Adventure Therapy community, including the past editor of the 5IATC/6IATC proceedings, and a convener of 7IATC.

Joelle Breault-Hood (PhD Candidate) is the coordinator of Outdoor Education at an independent boy's school and a sessional lecturer in Outdoor Education at the Australian Catholic University. She has been involved in OE for 20+ years as a facilitator, curriculum developer, program planner and risk assessor. She is currently working on her PhD investigating the impacts of outdoor education programs on adolescent girl's self-efficacy and body image.

Beth Christie is a lecturer in education in the outdoor and environmental education section at the University of Edinburgh and she is programme director for the MSc Learning for Sustainability. She is also the Associate Editor of the Journal of Adventure Education and Outdoor Learning.

Stories and storytelling as tools of teaching for change

Yeong Poh Kiaw

School of Sports, Health, and Leisure, Singapore

This paper explains the scholarly role of stories and storytelling and argues for their power and efficacy in creating a particular truth essential for knowing and being. Drawing on McDrury and Alterio's (2003) model of reflective learning through storytelling, this paper examines the significance role of stories and storytelling as tools for transition and transformation. The stories of four experiential educators and 10 learners involved in three outdoor and experiential programmes in Singapore were studied. This phenomenology and interpretive study adopted a narrative inquiry approach to elicit evidences of reflection, meaning making and changes. The author concludes that storytelling effectively deepens learning and can triggers transformative learning in a vast variety of configurations. The key to this process is the ability of listeners and the teller to engage in post-telling conversations that explore the stories in ways that clarify, deepen, enlarge, expose new facets, and experiment with new meaning. This paper posits that stories and storytelling can function as a powerful pedagogic approach that support changes in meaning schemes and perspectives.

References

McDrury, J., & Alterio, M. (2003). *Learning through storytelling in higher education: Using reflection and experience to improve learning*. Sterling VA, USA: Kogan Page.

Biography

Poh Kiaw a Lecturer in the School of Sports, Health, and Leisure, Republic Polytechnic, Singapore. Her research interests are in transformative pedagogy, story pedagogy, meaning making and reflection, outdoor and adventure learning processes, and representation of experience. In addition to studying the role of outdoor educator in Singapore, her current research examines curriculum impact on outdoor educator-to-be.

Student Perspectives on the Perceived Value of a Mandatory Outdoor Experience Program at a University in Canada.

****Poster****

Colleen Greasley

Laurentian University, Canada

Stephen D. Ritchie

Laurentian University, Canada

Bruce Oddson

Laurentian University, Canada

Jim Little

Laurentian University, Canada

Emily Tetzlaff

Laurentian University, Canada

Jean Benoit

Laurentian University, Canada

Jeffrey McGarry

Laurentian University, Canada

Outdoor orientation programs are usually optional experiences offered at the incoming first year undergraduate university students, and are flourishing in post-secondary institutions across the United States. This study examined a similar type of program offered at a small university in Canada, whereby undergraduate students in the School of Human Kinetics engage in a peer-led three-day wilderness canoe excursion in the boreal forest of northern Ontario. However, this particular program – called Outdoor School III (ODS3) – is unique in that it is a mandatory course for third year students, and is the third course in a progressive series of outdoor experience courses offered at the beginning of first, second, and third year. The final student assignment in the course is a written reflection that students submit electronically. All students, excluding trip leaders, who completed the 2015 ODS3 canoe course, were invited to participate in this study. We analyzed written reflections from consenting students using principles of realist evaluation (RE) and a computer-assisted qualitative data analysis software called Leximancer. Data analysis using RE involves the identification of contexts, mechanisms, and outcomes that relate to the perceived value of the ODS3 experience from the students' perspectives. Results will provide insight into why some students enjoyed and valued the experience and some

students did not. These findings will help improve the Outdoor School III program, as well as have implications for similar outdoor programs offered at other institutions.

Biographies

Colleen Greasley is a recent honours graduate with a Bachelor of Physical and Health Education (Health Promotion) at Laurentian University. Her academic program, as well as her passion in outdoor adventure activities, has developed her interest in the promotion of health and wellness in a wilderness environment.

Stephen Ritchie is an Associate Professor in the School of Human Kinetics at Laurentian University in Sudbury, Ontario Canada. Stephen is actively involved in a diverse portfolio of research devoted to understanding wilderness, adventure, and outdoor education in the context of achieving personal growth and holistic health outcomes.

Bruce Oddson is an Associate Professor in the School of Human Kinetics at Laurentian University in Sudbury, Ontario Canada. His current research focuses on health, learning, and things that help people flourish.

Jim Little is the Coordinator of the Outdoor Adventure Leadership Program at Laurentian University in Sudbury, Ontario Canada. Jim has integrated several research projects into outdoor-based academic programming including: examining the relationship between caloric intake and energy expenditure in backcountry travel, and leadership status congruency and cohesion in outdoor expedition groups.

Emily Tetzlaff is a Master of Human Kinetics student at Laurentian University in Sudbury, Ontario Canada. Her research interests focus on health promotion and occupational safety and health. She is also involved with the Health Promotion Without Borders program that works with the Source of Steppe Nomads NGO in Western Mongolia.

Jean Benoit is the Coordinator of the Outdoor Centre at Laurentian University in Sudbury, Ontario Canada. His responsibilities include teaching academic outdoor courses, supporting the Outdoor Adventure Leadership program at Laurentian University (LU), and managing outdoor equipment rental and the delivery of a host of outdoor programs offered through LU.

Jeffrey McGarry is a licensed Ontario teacher and Sessional Instructor in the Outdoor Adventure Leadership program at Laurentian University in Sudbury, Ontario Canada. Jeff has served many marginalized populations through adventure, and he recently launched a program, Connect Adventures, as an educational organization dedicated to reducing barriers for people participating in the outdoors.

Sustainable Science Education through outdoor experiences.

Kathy Snow

Cape Breton University, Canada

The Nova Scotia Department of Education and Early childhood development is undergoing a process of educational renewal, which asks educators to revision education with a focus on holistic learning. At the same time the province is facing school closures due to declining enrollments with budget cuts. Teachers often feel they are being asked to do more with less. Developing scientific understandings is a major issue in elementary science education. The content of science is often explained to children while the process of discovery remains elusive. By examining these two dimensions the author arrives at suggested definitions for what is meant by learning about science through science for science using outdoor spaces as a learning laboratory. Through a meta-analysis of science education literature contrasted with primary data collected in relation to science education learning design with both pre-service and practicing teachers suggestions for science education practice through outdoor experiences will be presented. The impact of these practices in relation to teacher empowerment, sustainable schools as well as how the knowledge, skills and values of sustainability are fostered in students.

Biography

Kathy Snow is an assistant professor at Cape Breton University. She is the editor of the Journal of Professional Online and Continuing Education and an executive board member of the Canadian Network for Innovation in Education. Her research interests include an examination of the nexus of educational technology, science education and sustainability.

The Danish TEACHOUT research project 2014-2017: integration of udeskole in schools.

Erik Mygind

University of Copenhagen, Denmark

Glen Nielsen

University of Copenhagen, Denmark

Camilla Roed Otte

University of Copenhagen, Denmark

Mads Bølling

University of Copenhagen, Denmark

Mikkel Bo Schneller

Health Promotion Research, Steno Diabetes Center, Denmark

Karen Barfod

VIA University College, Denmark

Peter Bentsen

Health Promotion Research, Steno Diabetes Center, Denmark

Evidence and knowledge about how education outside the classroom (EOtC) influences pupils - in Denmark called udeskole - is still lacking, as Danish research is a rather new phenomenon and limited to small case studies of the pupils' use of language, physical activity levels (Mygind, 2007), social relations (Mygind, 2009, Hartmeyer & Mygind 2015), as well as the extent and dissemination of udeskole (Bentsen et al., 2010), and how teachers prefer and use settings outside the classroom (Bentsen, Schipperijn & Jensen, 2013).

Therefore, larger quantitative studies about the impacts and outcomes of udeskole are needed, supplemented with qualitative studies, in order to provide the necessary basis of evidence and in-depth insight on which future policy decisions about teaching and learning can be based.

It is hypothesized that learning processes taking place in udeskole are motivating, socially inclusive and effective in increasing learning while also increasing the intensity and duration of physical activity of the pupils. Therefore a large-scale national (or nationwide) research project was launched with the aim to achieve reliable evidence about the strengths and weaknesses of practicing udeskole (TEACHOUT 2014-2017).

The main question is: Do the alternative teaching practices of udeskole increase and improve children's physical activity, academic learning, social interaction, and attitudes to school? And if so how? The extensive amount and the high quality of data

collected in the project is expected to give evidence and more knowledge on which to base future decisions on whether and how udeskole should be an integrated part of the Danish municipal primary and lower secondary school. We look forward to present preliminary results at the conference.

References

- Bentsen, P., Mygind, E., & Randrup, T. B. (2009). Towards an understanding of udeskole: Education outside the classroom in a Danish context. *Education*, 3-13, 37(1), 29-44. doi:10.1080/03004270802291780
- Bentsen, P., Schipperijn, J. & Jensen, F.S. (2013). Green space as classroom: outdoor teachers' use, preferences and ecostrategies in relation to green space. *Landscape Research*, 39(5), 561-57
- Hartmeyer, R. & Mygind, E. (2015) A retrospective study of social relations in a Danish primary school class taught in 'udeskole', *Journal of Adventure Education and Outdoor Learning*, 16:1, 78-89, DOI: 10.1080/14729679.2015.1086659
- Mygind, E. (2007). A comparison between children's physical activity levels at school and learning in an outdoor environment. *Journal of Adventure Education & Outdoor Learning*, 7(2), 161-176. doi:10.1080/14729670701717580
- Mygind, E. (2009). A comparison of children's statements about social relations and teaching in the classroom and in the outdoor environment. *Journal of Adventure Education & Outdoor Learning*, 9(2), 151-169. doi:10.1080/14729670902860809

Biography

Since 1981 **Erik Mygind** has been lecturer and head of all outdoor education (OE) programs (Bachelor, Master and PhD programs) at the University of Copenhagen. Research focus: Physical activity, bodily movement, teaching and social learning in primary and secondary school and head of the national TEACHOUT research project about udeskole (2014-2017)

Peter Bentsen, Senior Researcher, MSc, PhD. Health Promotion Research, Steno Diabetes Center. Research has generally focused on 'people, places and pedagogies' in relation to education and health promotion in the interface between the health, social and human sciences. The various research strands are three related large cross-disciplinary projects: PULSE, TEACHOUT and udeskole

Camilla Roed Otte, PhD Student, MA(Ed) in Educational. Department of Geoscience and Natural Resource Management, University of Copenhagen. Camilla is currently engaged with the TEACHOUT project aiming to discover learning processes in education outside the classroom.

Mads Bølling, PhD Student, MA(Ed) in Educational Sociology, Department of Nutrition, Exercise and Sports, University of Copenhagen. Mads is currently engaged with the TEACHOUT project aiming to discover if, how and why education outside the

classroom has an impact on pupils' social relations, inclusion, well-being and motivation.

Mikkel Bo Schneller, PhD student, MSc, Health Promotion Research, Steno Diabetes Center. Mikkel is currently engaged with the TEACHOUT project aiming to measure physical activity in education outside the classroom.

Karen Seierøe Barfod, PhD student, senior lecturer, VIA Didactics & Learning, program for Applied Research & Development. Karen is currently engaged with the TEACHOUT project aiming to investigate teaching methods in education outside the classroom.

Glen Nielsen, PhD, Assistant professor in social science of sports and exercise, Department of Nutrition, Exercise and Sports, University of Copenhagen.

The Effect of Ambient Temperature on Heart Rate Variability-Derived Energy Expenditure During a 12-day Canoe Trip.

****Poster****

Lyndsay Greasley

Laurentian University, Canada

Stephen D. Ritchie

Laurentian University, Canada

Bruce Oddson

Laurentian University, Canada

Sebastien Nault

Laurentian University, Canada

Dominique Gagnon

Laurentian University, Canada

Sandra C. Dorman

Laurentian University, Canada

This study was designed to evaluate the influence of ambient temperature on energy expenditure (EE). EE is an important variable in outdoor education and wilderness-adventure contexts. However, more evidence is required to understand the effect of ambient temperature on EE in outdoor settings. Heart-rate Variability (HRV) data can be collected continuously using a body-worn device and can be used to estimate real-time EE and assess changes in EE over time. This study involved the use of secondary data, collected during an academic field course, involving a two-week canoe expedition in June 2012 in northern Ontario, Canada. HRV data was collected from six participants who wore HRV monitors continuously for the entire expedition. Weather data was collected concurrently, every 20 minutes, using a handheld weather station. A research assistant traveling with the group, voice-recorded in real-time, the activities participants were engaging in as well as the start/finish time of each activity throughout the trip. Therefore, the confounding effect of activity-type (and level of exertion) was controlled by categorizing the data into activity codes; as determined from transcribed voice recordings. Thus, data was analyzed using a time series design in order to determine the relationship between temperature and energy expenditure during different types of activities (i.e. canoeing, portaging, and sleeping). The implications of this study include an improved understanding of the extent to which ambient temperature may need to be accounted for during

expedition meal planning, such that the adjustments in nutritional needs and rations can be defined and more successfully implemented.

Biographies

Lyndsay Greasley is a recent honours graduate with a Bachelor of Science in Kinesiology program at Laurentian University. Her research interests relate to nutrition and energy balance in wilderness settings. This stems from her lifelong passion pursuing outdoor activities, and a desire to expand her knowledge in outdoor-related health promotion.

Stephen Ritchie is an Associate Professor in the School of Human Kinetics at Laurentian University in Sudbury, Ontario Canada. Stephen is actively involved in a diverse portfolio of research devoted to understanding wilderness, adventure, and outdoor education in the context of achieving personal growth and holistic health outcomes.

Bruce Oddson is an Associate Professor in the School of Human Kinetics at Laurentian University in Sudbury, Ontario Canada. His current research focuses on health, learning, and things that help people flourish.

Sebastien Nault is a Master Lecturer in the Outdoor Adventure Leadership program at Laurentian University in Sudbury, Ontario Canada. His research interests relate to adapting the concepts of Japanese 'shinrin yoku' (forest bathing) within Canadian culture. He is also on the advisory board for the Source of Steppe Nomad NGO in Western Mongolia.

Dominique Gagnon is an Assistant Professor in the School of Human Kinetics at Laurentian University in Sudbury, Ontario Canada. His research focuses on the thermo-physiological responses of individuals performing physical activity, and he is particularly interested in cold exposure effects on energy metabolism in adventurers, athletes, and workers.

Sandra Dorman is an Associate Professor in the School of Human Kinetics and Director of the Centre for Research in Occupational Safety and Health at Laurentian University in Sudbury, Ontario, Canada. Her research interests focus on health promotion and prevention of disease, primarily in occupational settings with a focus on nutrition, specifically how food impacts health and fatigue and supports the energy demands of the job.

The effects of a wilderness mountaineering expedition on the development of Japanese college students and their environmental ethics.

Hiroshi Hamatani

Hokkaido University of Education, Japan

Climbing mountains is the most popular outdoor sport in Japan. Recently it has become more popular among the younger generation than it was in the past. According to historical records, Shinto priest trainees climbed mountains about 1400 years ago as part of their preparation, but climbing mountains was not popular for the general public. Western climbers started to climb mountains in Japan around 1880 and they strongly influenced Japanese climbers. Now both young and old generations enjoy mountain climbing. Why people keep on climbing mountains and what kind of factors attract these climbers to the sport is the topic of this paper. What kind of learning is accomplished in outdoor education through mountaineering? It is well known that mountaineering provides opportunity for challenge, striving, and achievement. But there are not many research studies about mountaineering, especially wilderness mountain expeditions in Japan. This research studies the relationship between the experience of mountaineering and the outcome for participant's development and environmental awareness. This study uses Means-End Analysis to examine the relationship between the mountaineering experience and effects on the mindset of student participants in a university wilderness mountaineering course. We found 5 strong relationship between mountaineering experience and effects from the analysis.

It is hoped that this research helps Japanese educators understand that wilderness education is an effective tool for human development and environment ethics.

Biography

Hiroshi Hamatani is associate professor at Hokkaido University of Education, Outdoor Life Course. He teaches mountaineering, canoeing, climbing, BC skiing, risk management class. He originally worked for Outward Bound Japan for 16 years as School director, Safety manager, operations director. He is a specialist of wilderness education and risk management in Japan.

The impact of outdoor education on the body image and self-efficacy of adolescent girls.

Joelle Breault-Hood

Western Sydney University, Australia

Tonia Gray

Western Sydney University, Australia

Son Truong

Western Sydney University, Australia

Jacqueline Ullman

Western Sydney University, Australia

We live in a visual culture that inundates us with images of an idealized body based on dominant Western societal and media influences. The body has become an object, a site of production and commerce. For many, having negative thoughts about our bodies has become normal. Poor body image can contribute to low self-esteem, low self-confidence and never feeling that one's body is adequate.

This research explores the possibility of an outdoor education program as an effective tool to curb the normalcy of poor body image. To do so, the impacts of outdoor education programs on the self-efficacy and body image of adolescent girls are in question. A mixed methods inquiry collects and examines data using the General Self-Efficacy Scaleⁱ and the Objectified Body Consciousness Youth Scaleⁱⁱ, focus group sessions and participant photo interviews. Participants are 13-15 year adolescent girls in Year 8 and Year 9 in New South Wales, Australia, who participate in outdoor education programs offered through the co-curricular component of their school.

In this workshop we will share the initial findings of the research. In particular the findings of the focus group sessions and the participant photo interview where girls respond (amongst other questions) to the following:

Focus Group Question: How did your feelings about your body *after* your outdoor education program compare to your feelings about your body *before* the course? Were they the same or different?

Photo Interview: What if body image was based on what bodies do for us rather than how they look?

Research is limited in the Australian context on the relationship between outdoor education, adolescent girls and body image. The anticipated research outcomes include:

- Gaining a better understanding of the role of outdoor education in affecting body image and self-efficacy of adolescent girls,
- Providing robust evidence-based research in Australian outdoor education, and
- Contributing gravitas when lobbying policymakers for outdoor education to be included in the Australian National Curriculum

¹ Schwarzer, R., & Jerusalem, M. (1995). Generalized Self-Efficacy scale. In J. Weinman, S. Wright, & M. Johnston, *Measures in health psychology: A user's portfolio. Causal and control beliefs* (pp. 35-37). Windsor, UK: NFER-NELSON.

¹ Lindberg, S. M., Hyde, J. S., & McKinley, N. M. (2006). A measure of objectified body consciousness for preadolescent and adolescent youth. *Psychology of Women Quarterly*, 30(1), 65-76.

Biographies

Joelle Breault-Hood (PhD Candidate) is the coordinator of Outdoor Education at an independent boy's school and a sessional lecturer in Outdoor Education at the Australian Catholic University. She has been involved in OE for 20+ years as a facilitator, curriculum developer, program planner and risk assessor. She is currently working on her PhD investigating the impacts of outdoor education programs on adolescent girl's self-efficacy and body image.

Associate Professor **Tonia Gray Ph. D.** is a Senior Researcher at Centre for Educational Research WSU. She has been involved in OE for 30+ years as a practitioner, researcher and curriculum developer. In 2014 she received the prestigious Australian Award for Excellence in University Teaching for her work in OE. Tonia is also the past editor of the AJOE and on the review panel for JEE and JAEOL

Dr Son Truong is a Lecturer at Western Sydney University. He takes an interdisciplinary approach to his work, which converges around issues of health and wellbeing of children and youth.

Dr Jacqueline Ullman is a Senior Lecturer at Western Sydney University. She is a specialist in Adolescent Development, Behaviour and Wellbeing.

The Influences of an Outdoor Education Program for Deaf Children on the Staff who can Hear.

****Poster****

Satoshi Tada

Meiji University, Japan

Masako Harigaya

Meiji University, Japan

Toshio Hoshino

Meiji University, Japan

Kei Hijikata

Asia University, Japan

The purpose of this study is to carry out an organized experimental camping as an outdoor educational program for deaf children, and to investigate the effect of this camping on the staff who are not hearing-impaired. This camping started in 2008. Participants were deaf children and their brothers and sisters. The participants in each camping were 5 to 13 people. There were some repeaters. The basis of their life for five days was "Staying in a tent" and "cooking outdoors." As for activities, playing in a stream, river trekking, mountain climbing, nature games, nature crafts, night hiking, and campfire were conducted. All participants communicated in sign language. Some staff members were hearing-impaired while some were not. Most of the staff who were not hearing impaired could not use sign language fluently. According to the results of the survey which staff evaluated the camping, the staff who were not hearing-impaired mentioned about the development of their understanding of hearing impairment and deaf children, such as "I understood the diverse way of communication with deaf people," "Anxiety or feeling of reluctance to come in contact with people with disabilities has diminished."

Moreover, the staff described that they acquired new viewpoints which leaders can be use for general camping, such as "I learned comprehensible communication," "I got a new perspective of risk management," and also they rediscovered the value of outdoor education, such as "New experiences at this camp encouraged me to be more involved in outdoor education".

Biographies

Satoshi Tada: Professor at Meiji University, Tokyo; Director of the Japan Outdoor Education Society; Committee member in the National Camping Association of Japan; has directed “Deaf Kids Camp” for hearing impaired children for eight years.

Masako Harigaya: Board member of National Camping Association of Japan; Assistant organizer for “Deaf Kids Camp”; has involved in International Camping Fellowship as a member for 20 years; has organized camps and outdoor activities for children and university students.

Toshio Hoshino: Professor at Meiji University, Tokyo; Board chairperson of the Japan Outdoor Education Society; President of the National Camping Association of Japan; Adviser for “Deaf Kids Camp”.

Kei Hijikata, Ed.D: Lecturer of Sports and Physical Education at the Asia University, Tokyo; Committee member of the Japan Outdoor Education Society; Committee member in the National Camping Association of Japan; has supported “Deaf Kids Camp”.

The Ontario Wilderness Leadership Symposium: A promising platform to engage, connect and support the future leaders of wilderness trips.

Kyle Clarke

Queen's University, Canada

Liz Kirk

Brock University, Canada

Emerging wilderness trip leaders require extended time spent in the field and under the mentorship of a competent professional in order to become sufficiently equipped to deal with the complex nature of their roles. Ideally, a new wilderness trip leader would participate in a training pathway that consists of a variety of specialized outdoor leadership courses and/or certification programs, along with the opportunity to lead in an authentic context while coached by an experienced mentor. Although certification courses abound and are seen as an essential prerequisite to enter this field, access to a key mentor is not often a requirement or afforded to new wilderness leaders when beginning a career. Recognizing the perceived absence of social support for new professionals working in the area of wilderness leadership and the pronounced difficulty faced by organizations wanting to retain newcomers in this position longer than one or two seasons, The Council of Outdoor Educators of Ontario (COEO) initiated an annual event named the Ontario Wilderness Leadership Symposium (OWLS) in an attempt to connect newcomers with experienced professionals actively working in the field. Guided by Lave and Wenger's (1991) concept of Community of Practice (CoP), we propose that the OWLS event and its particular design, can function as an entryway by which emerging wilderness trip leaders can gain access to potential mentors, receive advice and support, further develop leadership skills, and build a professional network amongst peers.

References

Lave, J. & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. New York, NY: Cambridge University Press.

Biographies

Kyle Clarke is a doctoral student within the Faculty of Education at Queen's University in Kingston, Ontario, Canada. He helped develop the OWLS program and also initiated the Horwood Canadian Student Outdoor Education Conference, held annually at Queen's University.

Liz Kirk currently works as a part-time instructor at Brock University in St. Catharines, Ontario, Canada. She is Vice President on the Board of Directors of the Council of Outdoor Educators of Ontario and thinks all species of owls are pretty neat!

The Promise of Phenomenology

Robbie Nicol

University of Edinburgh, Scotland

John Telford

University of Edinburgh, Scotland

There is now a growing body of scholarly work that explores the potential of outdoor education in providing nature-based experiences that, through greater connectedness to the 'natural' world, might contribute to understandings and practices of sustainable living. Outdoor Education traditionally emerged as a radical alternative to urban living perceived as detrimental to health, wellbeing and sustainability. The recent emergence of terms such as Outdoor Learning and Learning Outside the Classroom and the concomitant necessity of teaching in outdoor settings close to schools therefore presents a challenge. If the setting in which education takes place is now considered to be both local and remote (and all that exists in between) and the majority of schools are in urban areas then questions arise in relation to the theories and practices that underpin the assumptions that relate outdoor educational experiences with learning for sustainability. This presentation will interrogate these ideas through the lens of phenomenology. Key to this enquiry are the phenomenological concepts of 'place', 'presence' and 'proximity' which suggest that the way in which people experience the places they inhabit influences their values. However, in working towards understanding the wider moral implications for the way we relate to the planet is it sufficient simply to pay attention to whatever place we find ourselves in, or choose to be in with our learners? More specifically are certain learning outcomes relating to sustainable living better achieved in remote or urban locations? These questions will be explored with reference to literature.

Biographies

Robbie Nicol is a senior lecturer in outdoor environmental education at the University of Edinburgh and Head of Institute for Education, Teaching and Leadership. Whilst human activities are altering the planet's ability to sustain us he believes that the outdoors provide opportunities for individuals to rediscover their direct dependence on the planet.

John Telford is a lecturer in outdoor education at the University of Edinburgh. He is Programme Director for MSc Outdoor & Environmental Sustainability Education and MSc Outdoor Education. John's research interests include the ways that our relationship with the 'natural' or more-than-human world is mediated through our socio-cultural values and understandings.

The Relationship Between Outdoor Experience and Body Image in Female College Students.

Denise Mitten

Prescott College, United States

Body image is a significant personal and societal issue, especially for women. In westernized societies there is evidence of increasingly unhealthy, negative self-perceptions of body image among females, with the term normative discontent being coined to describe the cultural norm of women's destructive views of their physical bodies. The consequences of negative body image are far reaching--impacting many aspects of women's wellness, including self-esteem, self-efficacy, personal growth, positive relations, and purpose in life; all of which have broader implications on family, community, and environmental well-being. Past trends implied the need for further study with larger and more varied populations (Arnold, 1994; Kiewa, 2000; Pohl, Borrie, & Patterson, 2000; Ross, 2003; Mitten & Woodruff, 2010).

Through a self-report questionnaire this study explored the relationship between various aspects of outdoor activity, such as time, frequency, type of activity, and other factors, with body image among women. The questionnaire asked about past and current outdoor activities. The aim of this study is to help researchers, clinicians, and practitioners better understand connections between how many outdoor experiences a woman has and her body image. This study adds to the growing body of research attempting to understand factors that impact body image in women. For example, our research found that women who spend more than three hours a week engaged in nature-based activities had a significantly more positive body image than their counterparts, as did women who have spent at least seven overnights in the outdoors. By healing our internal relationship through time in nature, we are better able to have agency in other parts of life.

References

- Arnold, S. C. (1994). Transforming body image through women's wilderness experiences. In E. Cole, E. Erdman, & E.D. Rothblum (Eds.), *Wilderness therapy for women: The power of adventure* (pp. 43-54). NY, New York: Hawthorne Press.
- Kiewa, J., (2000). Outdoor adventure and body image: A change in focus. In L. West-Smith (Ed.), *Body stories: Research and intimate narratives on women transforming body image in outdoor adventure* (pp. 11-24). Edgewood, KY: Adventurehaven Press.
- Mitten, D. & Woodruff, S. (2010). The impact of short term adventure experiences on body image perceptions of women over 40. *Journal of Experiential Education* 32(3), 322-326.

- Pohl, S.L., Borrie, W.T., & Patterson, M.E. (2000). Women, wilderness, and everyday life: A documentation of the connection between wilderness recreation and women's everyday lives. *Journal of Leisure Research*, 32, 415-434.
- Ross, S. (2003). The therapeutic effects of an adventure challenge program on the personal empowerment of women survivors of sexual trauma. *The Journal of Experiential Education*, 25, 350.

Biography

Denise Mitten, PhD, internationally recognized for her scholarship in outdoor and environmental pedagogy, ethics, leadership, and gender, understands the significance of spiritual and relational considerations when working with people and the more-than-human world. Starting with Girl Scouts in the 1960s, Denise has worked in outdoor fields for 40+ years.

Towards a coherent theory of experience and education via occupations: a Deweyan excursus

John Quay

University of Melbourne, Australia

Dewey's *Experience and Education* is a foundational text in outdoor education. In it Dewey expounds the importance of the "and" in the title of this little book: we cannot understand education without understanding experience. With this in mind he argues that "a coherent theory of experience, affording positive direction to selection and organization of appropriate educational methods and materials, is required by the attempt to give new direction to the work of the schools" (1938, p. 30). In this presentation I bring Dewey's concern with experience and education together with a claim he made much earlier, in *Democracy and Education*, in a statement which does not mention experience by name but speaks as forthrightly about education. Here Dewey asserts that "education through occupations ... combines within itself more of the factors conducive to learning than any other method" (1916, p. 361). While such a statement seems to speak to vocational education, which we generally understand as training for a job, Dewey had much more in mind than that. The strength of an occupation (broadly conceived) is its meaningful organization of living experience. Occupations offer a fuller way of grasping education as growth: not just as knowing, not just as doing, but also as being. Being a friend, being a tent partner, being a skier, being a group member - all are occupations. My task in this presentation is to unpack the coherency of Dewey's theory of experience and to show how this works occupationally, thereby illuminating outdoor education differently. In addition I argue that the notion of occupations - understood as ways of being, doing and knowing - contributes to a conceptual language that enables more fruitful dialogue to occur between the discourses of outdoor education and mainstream schooling.

References

Dewey, J. (1916). *Democracy and education*. New York: The Free Press (MW 9.2-375).
Dewey, J. (1938). *Experience and education*. New York: Collier Books (LW 13.2-63).

Biography

Dr. John Quay is senior lecturer in the Graduate School of Education at the University of Melbourne. He is editor of the *Journal of Outdoor and Environmental Education*. His research interests revolve around connections between experience and education. He recently published 'Understanding Life in School: From Academic Classroom to Outdoor Education'.

Trusting the Journey: Embracing the Unpredictable, and Difficult to Measure Nature of Wilderness Educational Expeditions.

Morten Asfeldt

University of Alberta, Canada

Simon Beames

University of Edinburgh, Scotland

In 1983, Ewert called for the field of outdoor adventure education (OAE) to increase research efforts in order to understand the inner workings of OAE's black box. At the time, the literature claimed that there were a number of distinct and positive outcomes for OAE participants such as self-discovery and increased self-concept, yet it was unclear how or why these outcomes came about.

In the 30 plus years since Ewert's decree, the outcomes-based literature on educational expeditions has grown steadily and there has been an increase in the research activity aiming to answer the how and why questions. This has enabled the Educational Expeditions field to more deeply understand the inner workings what is less of black box and perhaps more of a rather pliable, rubbery container.

Our inquiry is a reflexive journey of storytelling and critical analysis that employs collaborative autoethnography as method. Collaborative autoethnography's appeal lies in its focus on using multiple perspectives to deeply understand stories that have from our own lived experiences, which has led to us constructing two assertions. First, there are inner corners of the black box (or pliable, rubbery container) that are unknowable and if they were knowable, would compromise at least two central pedagogical strengths of OAE: student- and place-responsiveness. Second, as outdoor educators, we must trust the journey to present opportunities for learning. It then becomes our responsibility as educators to be alert to these occasions and to facilitate learning from them, as opposed to assuming that we can plan and anticipate specific and predictable educational experiences.

References

Ewert, A. (1983). *Outdoor adventure and self-concept: A research analysis*. Eugene, OR: Center for Leisure Studies.

Biographies

Morten Asfeldt, Associate Professor of Physical Education, University of Alberta, Augustana Campus. Morten has extensive experience as a university teacher and researcher, commercial guide, and outdoor instructor. Designing and leading educational expeditions to the Canadian north is a particular area of expertise. His research interests include pedagogical aspects of educational expeditions, place-based education, history and philosophy of outdoor and experiential education, and leadership development.

Simon Beames is a senior lecturer at the University of Edinburgh. He has a long-standing interest in learning through journeys and, in 2010, edited the book *Understanding Educational Expeditions*.

Turfriluftsliv - constraints and possibilities

Jakob Haahr

Aarhus University, Denmark

Turfriluftsliv (outdoor education and outdoor recreation) stretches over a longer period of time. Turfriluftsliv can easily take place in a small area, but often it stretch out to larger areas. Examples of turfriluftsliv are hiking or going on a canoe trip in the landscape. Furthermore it is often connected with accommodation in bivouac, tent, shelter or cabin.

In Denmark, there is an increasing interest in turfriluftsliv. Popular landscapes for turfriluftsliv are often attractive for many stakeholders. This can lead to struggles between landowners, local businesses, the tourist industry, local inhabitants, administrators for outdoor-activities and practitioners of friluftsliv on the right to use and exploit these landscapes.

This study examines constraints and possibilities for turfriluftsliv in a case study covering five municipalities on Southern Funen in Denmark. 2009-2011 it was discussed whether a National Park should be initiated in the area. The study is based on Pierre Bourdieu's theories on socialization and power, building on a configuration analysis, inspired by Henning Eichberg. Following this theory; power is expressed in the language, through the body and in the formal political process.

The study aims to provide politicians, organizations and other stakeholders insight into the conditions of turfriluftslivet. The formal political process in order to create the National Park on Southern Funen is examined and analyzed in a power perspective.

Biography

Jakob Haahr is an assistant professor at Aarhus University, responsible for teaching in friluftsliv . He is also a PhD student conducting research on constraints and opportunities for friluftsliv in Denmark. Jakob was educated at the University of Southern Denmark (Master in History and Social Science) and in Norway "Outdoor Life, Culture and Nature guiding", at Telemark University College.

Understanding educational and well-being implications of learning outside the classroom in Singapore.

Susanna Ho

Ministry of Education, Singapore

Vilma D’Rozario

National Institute of Singapore, Singapore

Joyann Tang

National Institute of Singapore, Singapore

Anthony Wong Teck Boon

National Institute of Singapore, Singapore

Despite the wide range of evidence around the world that learning in nature has benefits, both educational and for well-being for both adults and children, there is limited research evidence of the educational and well-being implications of learning outside the classroom in Singapore. The evidence gathered in international and local literature about the educational and well-being benefits of learning outdoors, especially in wild habitats could potentially offer rich insights to Singapore’s education ministry’s recent inclusion of outdoor learning as part of formal curriculum. The second part of the paper delves into the data interpreted from in-depth interviews with Singaporean master outdoor and environmental educators, who are leaders/ activists in the field of outdoor and environmental education. The insights derived from the interviews with these local educators include tracing their development in the field of outdoor and environmental education/activism, their views of the benefits of being in nature and in wild habitats; their views on the connectedness between nature, kids, learning and well-being; and their views of the future of outdoor and environmental education in Singapore. The paper concludes with a discussion on the implications of the findings on the future of outdoor and environmental education/learning in Singapore.

Biography

Dr. Susanna Ho is a Senior Specialist with the Ministry of Education, Singapore, She is passionate about the outdoor education and an avid supporter of the local natural heritage. Susanna seeks to share her passion for outdoor learning through conducting professional development courses, forums and outdoor education related research projects.

Assoc Prof Vilma D'Rozario is Associate Professor with the Psychological Studies Academic Group at the National Institute of Education, Nanyang Technological University. She teaches pre-service counselling and graduate group counselling courses. Outside of her career in Psychology and Teacher Education, Vilma volunteers extensively in environmental and wildlife conservation projects in Singapore.

Joynn Tang obtained her bachelor's degree from the Faculty of Behavioral Sciences, HELP University Malaysia in 2012. She is currently a graduate student from the National Institute of Education's Counseling and Guidance Programme.

Anthony Wong Teck Boon obtained his BSc (Hons) Pharmaceutical Management from University of Bradford in 2007. He is currently a graduate student from National Institute of Education's Counselling and Guidance Programme.

Understanding the hidden curriculum in adventure education: A Delphi Study.

Denise Mitten

Prescott College, United States

Adventure education has a long history of influence by white, class-privileged males. From the late 1970s to the turn of the 21st century there was significant scholarship and program development to support the inclusion of more females in outdoor adventure (Hardin, 1979; Mitten, 1985; Humberstone & Lynch, 1991; Bell, 1996; Henderson, Bialeschki, Shaw, & Freysinger, 1996; Russell & Bell, 1996; Warren, 1996; Gray, 1997; Lugg, 2004). Australian, Canadian, New Zealand, UK, and US scholars are represented. This work changed the adventure education field by encouraging more women to be involved in outdoor experiences and accumulating a body of knowledge about women's needs and constraints in outdoor pursuits. As a result the number of women participating in many parts of outdoor adventure increased. However, the field continues to have a glass ceiling for women practitioners, with women in leadership positions not experiencing the kind of growth seen in participant involvement. Further, advanced outdoor technical skill development opportunities have fewer women taking part. While much has changed for women in adventure leadership, an examination of current trends is necessary.

This presentation incorporates research from a recent study designed to gather and disseminate information about the 'hidden curriculum' affecting women in adventure education. The hidden curriculum generally refers to the subtle or not-so subtle messages that are not part of the intended instruction; messages that promote discrimination and exclusivity in the formal curriculum. This Delphi study was a collaboration between Hampshire College and Prescott College faculty.

References

- Bell, M. (1996). Feminists Challenging Assumptions about Outdoor Leadership. In Warren, K. (Ed). *Women's Voices in Experiential Education*. Dubuque, IA: Kendall/Hunt Publishing Co. pp.141--155.
- Gray, T. (1997). Examining the Fruits of the Outdoor Education Tree from a Gender Perspective.
- Hardin, J. (1979). Outdoor/Wilderness Approaches to Psychological Education for Women: A Descriptive Study. (Doctoral Dissertation, University of Massachusetts). *Dissertation Abstracts International*, 40 (8): 4466-A.
- Henderson, K., Bialeschki, M., Shaw, S. and Freysinger, V. (1996). *Both gains and gaps: feminist perspectives on women's leisure*. State College, PA.: Venture Publishing, Inc.
- Humberstone, B., & Lynch, P.(1991). Girls' concepts of themselves and their experiences in outdoor education programs. *Journal of Adventure Education and Outdoor Leadership*, 8(3), 18-22.

- Lugg, A. (2004). Outdoor adventure in Australian outdoor education: Is it a case of roast for Christmas dinner?. *Australian Journal of Outdoor Education*, 8(1), 4-4.
- Mitten, D. (1985). A philosophical basis for a women's outdoor adventure program, *Journal of Experiential Education*, 8(2), 20-24.
- Russell, C. L., & Bell, A. C. (1996). A Politicized Ethic of Care: Environmental Education from an Ecofeminist Perspective. IN Warren, K. (Ed). *Women's Voices in Experiential Education*. Dubuque, IA: Kendall/Hunt Publishing Co. pp. 172 - 181.
- Warren, K. (1996). (Ed.) *Women's voices in experiential education*. Dubuque, IA: Kendall/Hunt.

Biography

Denise Mitten, PhD, internationally recognized for her scholarship in outdoor and environmental pedagogy, ethics, leadership, and gender, understands the significance of spiritual and relational considerations when working with people and the more-than-human world. Starting with Girl Scouts in the 1960s, Denise has worked in outdoor fields for 40+ years.

UPLOADS: Applying systems thinking to understand and prevent injury during led outdoor activities

Paul Salmon

University of the Sunshine Coast, Australia

Natassia Goode

University of the Sunshine Coast, Australia

Caroline Finch

Federation University, Australia

In Australia and worldwide led outdoor activity sectors experience adverse events that can cause injury, and in the worst cases, multiple fatalities. A known requirement for successful injury prevention is the ability to collect, analyze and disseminate appropriate data on injury and near miss incidents. Since 2011, the led outdoor activity sector in Australia has been engaged in a major program of research to address the lack of good quality data available on the frequency and causation of incidents associated with led outdoor activities (www.uploadsproject.org). The goal was to use state of the art accident causation theory and methods to develop a software tool to support organizations in collecting and analyzing their own incident and participation data and in turn contribute the data to a National Incident Dataset that is regularly analyzed and reported on. The ultimate goal was for the sector to use the system to better understand the risks it faces and take appropriate action. Accordingly, UPLOADS (*Understanding and Preventing Led Outdoor Accidents Database*) was developed and has recently been implemented as part of a 12 month national trial. This presentation gives an overview of UPLOADS and of the studies that were conducted during its development, testing and validation. It culminates with presentation of the findings from the 12 month national trial involving over 40 led outdoor activity providers, showing the system wide contributory factors involved in over 500 injury, illness, and near miss incidents.

Biographies

Paul Salmon is Professor in Human Factors and is an Australian Research Council Future Fellow. He is the director of the Centre for Human Factors and Sociotechnical Systems at the University of the Sunshine Coast and chief investigator of the UPLOADS research program.

Dr. Natassia Goode is the Organisational Safety Theme Leader within the Centre for Human Factors and Sociotechnical Systems. Natassia's research is concerned with the application of systems theory to enhance accident analysis and injury prevention efforts in safety-critical domains, such as occupational settings, transport and organized outdoor activities.

Professor Caroline Finch is an NHMRC Principal Research Fellow and the Director of the Australian Centre for Research into Injury in Sport and its Prevention (ACRISP).

Why we shut down the randomized controlled trials part of our own adventure therapy study - and what we did instead

Leiv Einar Gabrielsen

Sorlanset Hospital, Norway

This presentation is to a certain extent based on the article, “Why randomized trials are challenging within adventure therapy research: lessons learned in Norway”, which was published in the *Journal of Experiential Education* in 2016. Our clinical adventure therapy research project included a study design ambitious to the extent that we believed it to accommodate most recommendations for future research in the field, including the randomized controlled trial (RCT). However, in our meetings with seriously troubled adolescents, our aims of documenting intervention effects met a harsh and complicating reality, and the randomization process of youngsters with mental health issues grinded to a halt due to ethical, practical and empirical reasons.

In this presentation I will present practical stories from our attempt to conduct the RCT with adolescents referred to a specialized mental healthcare institution, and how good science, if we are not aware, can turn into bad science. Without becoming too technical I will encourage a plenary debate of methodical alternatives to the classic randomization process.

Biography

Leiv Einar Gabrielsen, Ph.D. Has together with colleagues developed a Norwegian based wilderness therapy program, Friluftsterap, offered as a stand alone treatment to at-risk adolescents referred to specialized mental health care. Gabrielsen is project manager for the clinical research that accompanies this new intervention, as well as a clinician in some of the wilderness therapy groups.

Words in Wild Spaces: Inspiring place relationships through wilderness literature.

Elizabeth Peredun

Brock University, Canada

Garrett Hutson

Brock University, Canada

Researching the implications of relationships between communities of people and places has become appealing to many disciplines, including, but not limited to, the field of outdoor recreation. Furthering the understanding of relationships to places within outdoor recreation contexts is integral to understanding ways of managing and promoting practices that affect environmental sustainability in a positive light. Sigurd Olson's wilderness writings incorporate a focus on humankind's relationship with natural and wild places. These wilderness writings can be applied as a way to examine how exposure to these texts can affect the development of sense of place and place understanding. This study used qualitative interviewing to respond to the following research questions:

- How do outdoor pre-professionals report the significance of place within wilderness literature?
- How are outdoor leisure places created through narrative and text?
- What is the role of specific narratives and texts in contributing to sense of place?
- Does literature contribute to creating a collective sense of place?

This presentation is based on the results of an eight month study, highlighting the significance of Olson's writings as a foundation for developing place relationships in outdoor recreation pre-professionals. This presentation will discuss the results of the study and implications of this research toward place education.

Biographies

Elizabeth Peredun recently completed her Bachelor of Recreation and Leisure Studies (Honours) with Brock University. Her BA in English Literature has influenced her research interests in both storytelling and place relationships. She enjoys using wilderness texts as way of connecting students to places through her work as a field instructor with the National Outdoor Leadership School.

Garrett Hutson is an Associate Professor in the Department of Recreation and Leisure at Brock University. His research focuses on the interconnected topics of place, outdoor recreation, and outdoor leadership education. His current research projects explore how human dimensions of place can inform sustainable outdoor recreation practice and resource management.

Author Index

First Name	Last Name	E-mail	Page No.
A			
Alan	Warner	alan.warner@acadiau.ca	72
Alessandro	Bortolotti	alessandro.bortolotti@unibo.it	109
Alexandra	Albert	a.albert@physiomental-training.de	74
Alistair	Stewart	a.stewart@latrobe.edu.au	54 , 65
Allen	Hill	allen.hill@utas.edu.au	15
Amanda	Lloyd	amanda.lloyd@outdoorconnections.com.au	32 , 126
Amélie	Lemieux	amelie.lemieux@mail.mcgill.ca	124
Andrew	Edwards-Jones	andrew.edwards-jones@plymouth.ac.uk	78
Andrew	Foran	aforan@stfx.ca	29
Anjeanette	LeMay-Crowtz	anjeanette.lemay@gmail.com	72
Anna	Keefe	annakeefe@gmail.com	13
Anne Holm	Jensen	annejensen31@hotmail.com	17
Annette	Gough	annette.gough@rmit.edu.au	107
Anthony L.	Webster	webstert@camosun.ca	70
Anthony	Wong	teck_boon@yahoo.com	155
B			
Barbara	Humberstone	Barbara.humberstone@bucks.ac.uk; Barbara.humberstone@btinternet.com	9
Beau	Miles	beau.miles@monash.edu	40
Beth	Christie	Beth.christie@ed.ac.uk	130
Bettina	Callary	Bettina_callary@cbu.ca	67
Bob	Henderson	bhender@mcmaster.ca	62
Brendon	Munge	b.munge@latrobe.edu.au	86
Bruce	Oddson	boddson@laurentian.ca	90 , 112 , 133 , 139
C			
Camilla Roed	Otte	cro@ign.ku.dk	136
Caroline	Finch	C.finch@federation.edu.au	159
Cathryn	Carpenter	cathryn.carpenter@vu.edu.au	45
Chaiti	Seth	chaiti.seth@acadiau.ca	72
Chris	Loynes	chris.loynes@cumbria.ac.uk	82 , 94
Chris	Walker	walkerc5@utas.edu.au	121
Christine	Norton	cn19@txstate.edu	130
Clare	Dallat	clare.dallat@research.usc.edu.au	96
Colin	Wood	c.wood@worc.ac.uk	71
Colleen	Greasley	cgreasley@laurentian.ca	133
Craig	Olsson	Craig.Olsson@rch.org.au	58
D			
David	Hayward	dhayward@utas.edu.au	11
David	Moltow	david.moltow@utas.edu.au	11
Denise	Mitten	mitten53@yahoo.com	45 , 149 , 157
Dominique	Gagnon	ddgagnon@laurentian.ca	90 , 139
E			
Edward (Ted)	Wilson	ted.wilson@rfs.org.uk	76

Elizabeth	Peredun	lp08ld@brocku.ca	162
Emily	Root	emily_root@cbu.ca	52
Emily	Tetzlaff	etetzlaff@laurentian.ca	133
Erik	Mygind	emygind@nexs.ku.dk	136
Erin	Cameron	ecameron@mun.ca	50
F			
Fiona	Stoddart	fiona.stoddart@cumbria.ac.uk	76
G			
Garrett	Hutson	ghutson@brocku.ca	162
Genevieve	Huneault	huneault@unbc.ca	89
George	Patton	george.patton@rch.org.au	58
Glen	Nielsen	gnielsen@nexs.ku.dk	17 , 63 , 136
Glyn	Thomas	gthomas2@usc.edu.au	86
Graham	Moger	mogerg@hope.ac.uk	66
H			
Heather	Grenon	h.grenon@federation.edu.au	19
Heidi	Smith	Heidi.Smith@utas.edu.au	11 , 15 , 43
Helen	Chick	Helen.Chick@utas.edu.au	121
Hiroshi	Hamatani	Hamatni12@gmail.com	141
I			
Ian	Blackwell	ian.blackwell@plymouth.ac.uk	100
Ian	Williams	ian.williams@mcri.edu.au	23 , 58 , 119
J			
Jacqueline	Ullman	J.Ullman@westernsydney.edu.au	142
Jakob	Haahr	jhaahr@ph.au.dk	154
Jakob F.	Porsteinsson	jakobf@hi.is	110
Jan	Arvidsen	jarvidsen@health.sdu.dk	98
Janet	Dyment	jdymment@utas.edu.au	15 , 121
Janni	Niclasen	janni.niclasen@psy.ku.dk	63
Jay	Roberts	roberja@earlham.edu	8
Jean	Benoit	jz_benoit@laurentian.ca	133
Jeffrey	McGarry	jx_mcgarry@laurentian.ca	112 , 133
Jennie	Aronsson	jennie.aronsson@plymouth.ac.uk	68
Jennifer	Wigglesworth	12jcw4@queensu.ca	21
Jim	Little	jlittle@laurentian.ca	90 , 133
Jo-Ann	Episkenew	jo-ann.episkenew@uregina.ca	
Joelle	Breault-Hood	jbreaulthood@gmail.com	130 , 142
John	Hunter	jhunter@psy.otago.ac.nz	103
John	Quay	jquay@unimelb.edu.au	151
John	Telford	john.telford@ed.ac.uk	26 , 148
John Craig	Hudec	John_hudec@cbu.ca	47
Jolie-Mayer	Smith	jolie.mayer-smith@ubc.ca	13
Jon Torfi	Jónsson	jtj@hi.is	110
Jonas	Mikaels	jonas.mikaels@gih.se	31
Joynn	Tang	joynntang@gmail.com	155
K			
Karen	Barfod	ksba@viauc.dk	48 , 136

Seierøe

Katerina	Pata	katerina_tavros@hotmail.com	39
Kathleen	Pleasants	k.pleasants@latrobe.edu.au	123
Kathy	Snow	Kathy_snow@cbu.ca	135
Kei	Hijikata	hkei@asia-u.ac.jp	144
Kirsti Pedersen	Gurholt	k.p.gurholt@nih.no	10 , 82
Kyle	Clarke	kyle.clarke@queensu.ca	88 , 146
L			
Lauren	Rose	lauren.rose@unimelb.edu.au	23 , 58 , 119
Lázaro	Mediavilla Saldaña	Lazaro.mediavilla@upm.es	30
Leiv Einar	Gabrielsen	leiv.einar.gabrielsen@sshf.no	161
Liesel	Carlsson	liesel.carlsson@acadiu.ca	72
Linda	Goulet	lgoulet@fnuniv.ca	
Liz	Kirk	lizkirk55@gmail.com	146
Liz	Speelman	liz.speelman@gcsu.edu	38
Lyndsay	Greasley	lgreasley@laurentian.ca	139
M			
Mads	Bølling	mab@nexs.ku.dk	17 , 63 , 136
Malcolm	Nicholson	nicholson.malcolm.a@edumail.vic.gov.au	34
Marcus	Morse	m.morse@latrobe.edu.au	27
Margie	Campbell-Price	margie.campbell-price@otago.ac.nz	80
Mark	Leather	mleather@marjon.ac.uk	117
Martin	Gilchrist	Martin.Gilchrist@naturalengland.org.uk	100
Martin	Lindner	lindner2@staff.uni-marburg.de	82 , 115
Masako	Harigaya	GHH10426@nifty.com	144
Matt	Stevenson	mpe@ign.ku.dk	17
Megan	Hyslop	meganhyslop@yahoo.ca	99
Michelle	Tollit	michelle.tollit@mcri.edu.au	23
Mike	Boyes	mike.boyes@otago.ac.nz	103 , 115
Mike	Brown	michaelb@waikato.ac.nz	90
Mikkel Bo	Schneller	mkbs@steno.dk	136
Mitchell	McLarnon	mitchell.mclarnon@mail.mcgill.ca	84 , 124
Morten	Asfeldt	morten.asfeldt@ualberta.ca	92 , 152
N			
Naomi	Wright	naomi.wright@plymouth.ac.uk	68
Natassia	Goode	ngoode@usc.edu.au	96 , 159
Nathan	Fox	nathan.fox@forestry.gsi.gov.uk	76
Nevin J.	Harper	harpern@camosun.ca	70
Nicholas	Schwass	nschwass@lakeheadu.ca	28
Nicholas Beckett	Brown	nbeckettbrown@laurentian.ca	90
Nick	Allen	nallen3@uoregon.edu	58
Nicole	Taylor	nst25@uowmail.edu.au	130
Niels Ejbye	Ernst	nee@viauc.dk	48
Noel	Gough	n.gough@latrobe.edu.au	107

P			
Patrick	Byrne	byrnep@mcmaster.ca	36 , 69
Patrick	Maher	Pat_Maher@cbu.ca	67
Paul	Dudgeon	dudgeon@unimelb.edu.au	58
Paul	Heintzman	pheintzm@uottawa.ca	21
Paul	Salmon	psalmon@usc.edu.au	96 , 159
Peter	Becker	drpeterbecker@googlemail.com	82
Peter	Bentsen	pebt@steno.dk	17 , 48 , 136
Peter	Holmes	p.holmes@latrobe.edu.au	54
Peter	Martin	peter.martin@federation.edu.au	19
Phil	Mullins	mullins@unbc.ca	89
R			
Rashmi	Garg	rgarg@laurentian.ca	56
Ray	Hollingsworth	ray.hollingsworth@aut.ac.nz	128
Robbie	Nicol	Robbie.Nicol@ed.ac.uk	148
Roger T.	Couture	rcouture@laurentian.ca	56
Rowena	Passy	rpassy@plymouth.ac.uk	78 , 100
S			
Sandra C.	Dorman	sdorman@laurentian.ca	139
Sandy	Allen-Craig	sandy.allencraig@acu.edu.au	45
Satoshi	Tada	tadas@meiji.ac.jp	144
Sean	Blenkinsop	sblenkin@sfu.ca	26
Sebastien	Nault	snault@laurentian.ca	90 , 139
Shannon	McNatty	shannonmcnatty@yahoo.com	103
Simon	Beames	simon.beames@ed.ac.uk	109 , 114 , 152
Son	Truong	S.Truong@westernsydney.edu.au	32 , 126 , 142
Søren	Andkjær	sandkjaer@health.sdu.dk	41 , 75 , 115
Stephen D.	Ritchie	sritchie@laurentian.ca	90 , 112 , 133 , 139
Sue	Waite	sjwaite@plymouth.ac.uk	68 , 78 , 100
Susanna	Ho	Susanna_Ho@moe.gov.sg	155
T			
TA	Loeffler	taloeffler@mun.ca or taloeffler@gmail.com	45 , 50
Takano	Takako	takano@aoni.waseda.jp	92 ,
Tarun	Katapally	Tarun.katapally@uregina.ca	
Therese	Oettl	thereseoettl@gmail.com	102
Tim	O'Connell		112
Todd	Ogryzlo	togryzlo@laurentian.ca	56
Tom G.	Potter	tpotter@lakeheadu.ca	28 , 41 , 115
Tonia	Gray	T.Gray@westernsydney.edu.au	32 , 45 , 61 , 126 , 130 , 142
Tony	Gee	tonygworkshop@gmail.com	
Tony	Robinson	tony.robinson@gilson.vic.edu.au	105

Toshio	Hoshino	hoshino@gf6.so-net.ne.jp	144
V			
Vagn Adler	Sørensen	vagas@odense.dk	75
Vicente F	Gómez Encinas	v.gencinas@upm.es	30
Vilma	D'Rozario	vilma.drozario@nie.edu.sg	155
Y			
Yeong Poh	Kiaw	yeong_poh_kiaw@rp.edu.sg	132
Z			
Zabe	MacEachren	maceache@queensu.ca	25

Cape Breton University



ARC'TERYX



Parks
Canada

Parcs
Canada





7TH INTERNATIONAL
OUTDOOR EDUCATION RESEARCH
CONFERENCE
UNAMA'KI/CAPE BRETON ISLAND
NOVA SCOTIA, CANADA