Strategic Research Groups Round Up of Recent Research, Policy and Practice - June 2016

RESEARCH

Mitigating stress and supporting health in deprived urban communities: the importance of green space and the social environment.

Ward Thompson, C. Aspinall, P., Roe, J., Robertson, L. & Miller, D. 2016 International Journal of Environmental Research and Public Health

The focus of this paper is the nature of access to green space (i.e., its quantity or use) necessary before any health benefit is found. The amount of green space in the neighbourhood, and in particular access to a garden or allotment, was significant predictors of stress. Physical activity, frequency of visits to green space in winter months, and views from the home was predictors of general health.

The impact of children's exposure to greenspace on physical activity, cognitive development, emotional wellbeing, and ability to appraise risk

Jonathan S. Ward, J. Scott Duncan, Aaron Jarden, Tom Stewart. Health & Place, Volume 40

Findings confirmed that greenspace exposure is positively associated with moderate to vigorous physical activity in children. Furthermore, both greenspace exposure and MVPA were related to greater emotional wellbeing. Risk-taking and sensation seeking scores were positively associated with MVPA, but not with greenspace exposure.

Effectiveness of after-school interventions at increasing moderate-to-vigorous physical activity levels in 5- to 18-year olds: a systematic review and meta-analysis.

Mears R, Jago R. Br J Sports Med. 2016

The effectiveness of after-school interventions varied considerably and comparisons between studies limited by different methodological study designs. Subgroup analyses within a small minority of studies revealed significant benefits in overweight/obese children and boys. There was a lack of convincing evidence that interventions based on theories of behaviour change were more effective than those with no underlying theory.

A cross-sectional study examining predictors of visit frequency to local green space and the impact this has on physical activity levels

EP Flowers, P Freeman, VF Gladwell - BMC Public Health, 2016

Nature relatedness was the strongest predictor for both visit frequency to local green space and meeting Physical Activity guidelines. Results show that perceived quality is a better predictor of visit frequency to local green space than objective quantity of local green space. The odds of achieving the recommended amount of PA was over four times greater for people who visited local green space once per week compared to never going.

A randomized controlled trial for families with preschool children-promoting healthy eating and active playtime by connecting to nature

T Sobko, M Tse, M Kaplan - BMC Public Health, 2016

Promotion of healthy lifestyles in children focuses predominantly on proper nutrition and physical activity, elements now widely recognised as essential for a healthy life. The proposed project aims to investigate whether connecting families to nature positively influences physical activity (i.e., active playtime) and healthy eating routines in children aged 2 to 4.

Active Play, Physical Activity and Fundamental Movement Skills

A Johnstone - 2016

This brief literature review provides the background literature to the evaluation of Inspiring Scotland's Active Play Programme. The evaluation has the following research question: does the implementation of an active play programme improve physical activity levels and fundamental movement skills competency in children?

Coastal proximity and physical activity. Is the coast an underappreciated public health resource?

White, M.P., Wheeler, B.W., Herbert, S., Alcock, I. & Depledge, M.H. (2014). Preventive Medicine Participants were drawn from Natural England's Monitor of Engagement with the Natural Environment Survey (2009-2012). Analyses were based on self-reported physical activity for leisure and transport. A small, but significant coastal proximity gradient was seen for the likelihood of achieving recommended guidelines of physical activity.

Energy expenditure on recreational visits to different natural environments: Implications for public health

Elliott, L.R., White M.P., Taylor A.H. & Herbert, S. (2015). Social Science and Medicine

Using Natural England's Monitor of Engagement with the Natural Environment Survey. This paper demonstrates that countryside and urban greenspace environments were associated with more intense activities than visits to coastal environments. However, visits to coastal environments were associated with the most energy expenditure overall due to their relatively long duration.

Developing an audit checklist to assess outdoor falls risk

Curl, A., Ward Thompson, C., Aspinall, P. and Ormerod, M. 2016.. Proceedings of the Institution of Civil Engineers: Urban Design and Planning

This paper develops an understanding of environmental factors that cause falls or fear of falling by using interviews with recent fallers to explore how they navigate the outdoor environment. The audit checklist can assist occupational therapists, urban planners, designers and managers in working to reduce the occurrence of outdoor falls among this vulnerable user group

Outdoor Environmental Supportiveness and Older People's Quality of Life: A Personal Projects Approach

Curl, A., Ward Thompson, C., Aspinall, P. 2016.. Journal of Housing for the Elderly

This paper presents an approach to exploring the role of environmental supportiveness in contributing to older people's quality of life. We explore the relationship between outdoor environment and QoL. There is a positive relationship between the number of outdoor personal projects older people participated in and measures indicative of their QoL.

Community gardens as sites of solace and end-of-life support: a literature review

Marsh P & Spinaze A. International Journal of Palliative Medicine

A literature review was undertaken to investigate the nexus between community gardens and end-of-life experiences (including grief and bereavement) in academic research. The authors found three points of commonality: both share a need and capacity for a) social/informal support, b) therapeutic space, and c) opportunities for solace.

<u>Promotion of Inclusive Society through Therapeutic Sensory Stimulation Garden for the Intergenerational</u> Society

H Hussein, SA Ishak, Z Omar - Environment-Behaviour Proceedings Journal, 2016

Outcomes showed that users' engagement with the landscape features promotes positive developments in social behaviours. In contrary, it proved a weak partnership between practitioners, researchers, authorities and users as well as non-availability of design guidelines for these gardens.

Social Work Students' Attitudes toward the Natural Environment

CB Jung - 2016

Social work practitioners and scholars are advocating for incorporating environmental justice into social work education, but have yet to adequately develop the research and strategies to do this. Analysis of data found social work students were less pro-environment than populations within previous studies. Although, social work students reported the desire to learn more about environmental issues and felt as though it would help them become better social workers.

Values towards waterways in south east Queensland: Why people care

NA Jones, H Ross, S Shaw, K Witt, B Pinner, D Rissik - Marine Policy, 2016

The diverse ways people interact with and relate to aquatic environments are often overlooked in planning and management. This misses opportunities as people's decisions and actions have impacts on how natural systems function. The study found that waterway environments provide people with rich and meaningful experiences, and that individuals hold several values each.

Feelings of restoration from recent nature visits

White, M.P et al Journal of Environmental Psychology

Exposure to natural environments can help restore depleted emotional and cognitive resources. Using data from Natural England's Monitoring Engagement with the Natural Environment survey (2009–2011), this paper investigated feelings of restoration recalled by individuals after visits to different natural environments within the last week. Restoration was positively associated with visit duration and visits with children were associated with less restoration than visits alone.

Mindful learning can promote connectedness to nature: Implicit and explicit evidence

X Wang, L Geng, K Zhou, L Ye, Y Ma - Consciousness and Cognition, 2016

We apply a novel method into the field of environmental protection.

We examine the influences of mindful learning on connectedness to nature.

Implicit Association Test was used to measure the implicit connectedness to nature.

Mindful learning can promote connectedness to nature both implicitly and explicitly

The impact of greenery on physical activity and mental health of adolescent and adult residents of deprived neighborhoods: A longitudinal study

JS Gubbels et al - Health & Place, 2016

The study examined the impact of changes in greenery on PA and mental health on adolescents and adults from severely deprived neighborhoods. Changes in greenery did not yield consistent positive results on PA and mental health but greenery was positively related with adolescents' cycling and adults' mental health.

Recovering mental health across outdoor places in Richmond, London: Tuning, skill and narrative

K Bierski - Health & Place, 2016

Both scientific and popular discourses assume that the environment can exert an influence on human health. This paper discusses how people affected by mental health problems sought to recover by visiting outdoor places. Recovery from mental ill-health was not an outcome of being in a particular place, but part of an ongoing process of relearning how to live in and as part of the environment.

Experiential key species for the nature-disconnected generation

C Battisti - Animal Conservation, 2016

Stimulating experiences and familiarization with local nature induce a link with the environment, preventing a progressive degradation of the connection with nature as a result of 'digital distraction'. These 'Children of a Lesser God' ecosystems (marginal areas, suburban rural contexts, etc.) contain a large set of species and communities, often in degraded condition. Interestingly, a limited set of target taxa historically has always captured the attention of children, often through ritual and instinctive actions (hunting, gathering, farming) having beneficial long-term cognitive effects. These could be included in a new category of conservation-related species: Experiential Key Species (EKS).

The relationship between affective connections to animals and proenvironmental behaviors

A Grajal, JF Luebke, S Clayton, LADG Kelly - Conservation Biology, 2016

Using a moderated-mediation analysis of a survey of U.S. zoo and aquarium visitors this paper looks at the relationship between the sense of affective connection with animals and self-reported engagement in proenvironmental behaviors. There was a significant, directional relationship between affective sense of connection with animals and self-reported pro-environmental behaviors.

The Effect of a Canoe-Based Wilderness Immersion Experience on Young Adolescents' Connectedness to

Nature

RM Feldbrugge - Masters Thesis. University of Minnesota

Prior to the experience participants level of connectedness was measured using the Connectedness to Nature Scale-Revised as well as open-ended questions. Following their experience, their level of connectedness was measured again. The results of the study indicate that a canoe-based wilderness immersion experience has a positive effect on young adolescents' connectedness to nature.

Positive motivational experience over a three-day outdoor adventure trek in Peru

S Houge Mackenzie, JH Kerr - Journal of Adventure Education and Outdoor Learning, 2016

Overall, the data indicated increased positive motivational experience over the course of the adventure trek. Achieving trekking goals, experiencing scenery, views and the natural environment, and social interaction with other trekkers, guides and local people were key aspects found to positively influence the subjective outdoor leisure experience.

Both Direct and Vicarious Experiences of Nature Affect Children's Willingness to Conserve Biodiversity

M Soga, KJ Gaston, Y Yamaura, K Kurisu, K Hanaki - International Journal of Environmental Research and Public Health 2016

Children's affective attitudes and willingness to conserve biodiversity were positively associated with the frequency of both direct and vicarious experiences of nature. This study demonstrates that children who frequently experience nature are likely to develop greater emotional affinity to and support for protecting biodiversity.

Educational impact on the relationship of environmental knowledge and attitudes

AK Liefländer, FX Bogner - Environmental Education Research, 2016

This study examines the relationships between the environmental attitudes and environmental knowledge of schoolchildren within the framework of an environmental intervention. Summary findings include children who refrain from (ab)using nature also seem to put more effort into improving their environmental knowledge and/or children who engage in learning about the environment will become less exploitative towards the environment.

Teaching Psychology for Sustainability: The Why and How

SM Koger, BA Scott - Psychology Learning & Teaching, 2016

Recently, conservation biologists, environmental policy makers, and other experts have recognized the importance of engaging with experts on human behavior (i.e., psychologists) in order to effect behavioral change in a sustainable direction. This paper provides an introduction to the rationale for integrating sustainability topics into psychology courses, and psychological concepts into ESS classes, along with some strategies for doing so.

<u>Teaching in the Field: What Teacher Professional Life Histories Tell About How They Learn to Teach in the Outdoor Learning Environment</u>

KK Feille - Research in Science Education, 2016

This research investigates the professional life histories of upper elementary science teachers who were identified as effective both within the classroom and in the outdoor learning environment (OLE). The narratives of five teachers, collected through semi structured and open-ended interviews, provided the data for the study.

Children's reflections on play

K Nugin, M Veisson, M Tuul, T Õun, S Suur - Journal of Playwork Practice, 2016

The results suggest that children find it difficult to give a definition of play. Play was strongly related to fun, a good mood and not being bored, and the children connected it with learning. They also pointed out that they needed more space for playing. Among the group differences was a preference for 6- to 7-year-old boys to play outdoors.

Introduction to Play and Recreation, Health and Wellbeing in Geographies of Children and Young People

B Evans, J Horton - 2016

This chapter provides an orientation and companion piece to the array of chapters collected in this volume. In relation to the section on health and wellbeing, the following three themes are outlined: children as knowledgeable actors in the context of health and wellbeing, challenging dominant policy and media representations of children and young people's health and wellbeing, and the everyday and institutional spaces of children's health and wellbeing.

A comparison of childrens' statements about social relations and teaching

E Mygind Journal of Adventure Education and Outdoor Learning

It is concluded from these case studies that the combination of classroom and outdoor teaching over a three-year period had a positive effect on the children's social relations, experience with teaching and self-perceived physical activity level

The Foundation Phase in Wales—a play-based curriculum that supports the development of physical literacy

N Wainwright, J Goodway, M Whitehed, A Williams. Education

With growing recognition of the importance of physical literacy and the role that Physical Education plays in its development, a three-phase complementarity mixed methods study explored the impact of the welsh curriculum on pupils' physical literacy, finding that the Foundation Phase makes a positive contribution to the development of physical literacy

USING artwork to market sensitive issues within heritage museums: three case studies

R Bennett, S Shaw, R Kottasz - Museum Management and Curatorship, 2016

This paper presents the outcomes to three case studies of heritage museums that employed contemporary artwork to arouse visitors' interest in subjects covered by these museums but which could not easily be examined using conventional media. It appeared that collaborations worked best when artists were given full control over the display of their creations.

East Cork's Quiet Revolution: The Role of Ballymaloe Cookery School in Ireland's Changing Foodscape

K Tobin, B Hickey, M Linehan – From the Dublin Gastronomy Symposium 2016

The objective of this paper is to consider the school's achievements and understand how the business emerged, what values underpin its operations, and how it has evolved. This study further seeks to situate Ballymaloe Cookery School within a wider context of Irish food culture, and highlight the impact the cookery school has had on revolutionising Irish food.

The impact of a first-generation immigrant environment on the heritage language: productive vocabularies of Polish toddlers living in the UK and Ireland

A Miękisz, E Haman, M Łuniewska, K Kuś, C O'Toole... - International Journal of Bilingual Education and Bilingualism 2016

The expressive lexical skills of Polish bilinguals living in the UK and Ireland were assessed. Polish vocabulary scores were compared to those of Polish monolinguals. Results showed substantial differences in Total Conceptual Vocabulary and single-language vocabulary scores between the groups.

Fresh Contacts, Education, and the Cultural Heritage

J Bristow - Book Chapter in 'The Sociology of Generations'

Education is properly understood as a generational responsibility, in which the accumulated cultural heritage is passed on to students who, because they have grown up in different times, will take and shape this knowledge in their own way. This chapter develops Mannheim's understanding of the importance of 'fresh contacts' to discuss the crisis of the curriculum over the twentieth century, where ambivalence about the cultural heritage has allowed instrumental imperatives to dominate the purpose of education.

Children, Nature, Cities - book

M Kelley - Children, Nature, Cities, 2016

This volume explores how dichotomies between nature/culture, rural/urban, and child/adult have

structured our understandings about the place of children and nature in the city. By placing children and youth at the center of re-theorising the city as a socio-natural space, the book illustrates how children and youth's relations to and with nature can change adultist perspectives and help create more ecologically and socially just cities. the volume asks what happens when we re-invent urban natures with children's needs and perspectives in mind.

Sowing Seeds in the City

Brown, Sally, McIvor, Kristen, Hodges Snyder, Elizabeth - editors

The potential impacts of urban agriculture on a range of ecosystem services including soil and water conservation, waste recycling, climate change mitigation, habitat, and food production is only beginning to be recognized. Those impacts are the focus of this book. Understanding the benefits of these activities across scales will help this movement flourish.

Key insights for the future of urban ecosystem services research

P Kremer, Z Hamstead, D Haase, T McPhearson et al - Ecology and Society, 2016

The insights from our review indicate that cross-sectoral, multiscale, interdisciplinary research is beginning to provide a solid scientific foundation for applying the ecosystem services framework in urban areas and land management. Our review offers a foundation for seeking novel, nature-based solutions to emerging urban challenges such as environmental change issues.

Outdoor pedestrian navigation assistance with a shape-changing haptic interface and comparison with a vibrotactile device

AJ Spiers, AM Dollar - 2016 IEEE Haptics Symposium (HAPTICS), 2016

By targeting haptic sensory channels when walking, pedestrian navigation systems (as found in smartphone apps) have the potential to allow both visually impaired and sighted users to pay greater attention to their surroundings. In line with this idea, this paper proposes mechanotactile shape-changing interfaces as an alternative to the more commonly used haptic modality of vibrotactile feedback. It evaluates the potential for haptic guidance in a realistic outdoor navigation task.

Egress! How technophilia can reinforce biophilia to improve ecological restoration

JC Buettel, BW Brook - Restoration Ecology, 2016

For effective and sustained ecological restoration, community support is essential. Yet, in modern society, artificial constructs and electronic technology now dominate most peoples' interests (technophilia). This has led to a perceived growing disconnection between humans and nature. We ask how such technology might be harnessed as an agent of connection to the environment, rather than being seen as a driver of detachment.

<u>Cultural Pathology of double glazed windows in terms of environmental connectivity culture in Iran</u>

N Parsaei, RSA Navasar, M Banaei - Environment-Behaviour Proceedings Journal, 2016

One of the main sustainable products for reducing fuel consumption is a double-glazed window. Despite the positive impacts of these windows in Iran, maybe usage of them has negative effects on environmental connectivity.

Lust att lära matematik: Utomhuspedagogik på mellanstadiet

A Bergman - Thesis, Umeå University, Sweden. 2016

This is a study of how outdoor education in mathematics might affect the enjoyment in learning. In addition, the study examined whether boys and girls are affected equally by the outdoor education. The result shows that the majority of the pupils in grade four think it is positive to have outdoor lessons in mathematics. They also think it's the same level of difficulty as the regular classes, but that the learning would increase some. The girls were more positive than boys.

Feminist Outdoor Leadership: Challenging hegemonic masculinity through Outdoor Education

A Smith – Thesis Portland State University 2016

The thesis argues that Outdoor Education, due to its unique goals and values, is an excellent venue for

challenging hegemonic masculinity. Outdoor Education is capable of manifesting challenges to hegemony most when coupled with what I call 'Feminist Outdoor Leadership.' Feminist Outdoor Leadership shares power horizontally, acknowledges expressions of domination in space and language, invites participants to participate with their whole, emotional and relational selves.

Middle School Pre-Service Teachers' Sense of Self-Efficacy in Relation to Authentic Learning Experiences

R Dever, S Clement - Electronic Journal of Science Education, 2016

The focus of this research was to test the impact of an authentic science experience on pre-service teachers' self-efficacy and their beliefs about their perceived outcomes with middle level students. Data show that there was a statistically significant decrease in the levels of self-efficacy towards teaching science and no significant change in their beliefs about having positive outcomes.

Experience Based Approach to Environmental Education for Secondary Teacher Education

B Razia, N Ahmad - International Journal of Scientific Research, 2016

The nature of the environmental education stresses the importance of commitment from teachers to involve him/her-self and make students to involve in the environmental related actions. Opportunities should be provided to pre-service teachers to practice different teaching techniques so that in real teaching situations are able to discharge their duties efficiently in the area of environmental education.

Effectiveness of mobile apps in teaching field-based identification skills

RL Thomas, MDE Fellowes - Journal of Biological Education, 2016

This study investigates if mobile technology could improve field-based learning, using ability to identify birds as the study metric. We find no evidence that mobile technology improved students' ability to retain what they experienced in the field; indeed, there is evidence that traditional field guides were more useful to students as they attempted to identify new species

Assessing learning in the early years' outdoor classroom: examining challenges in practice

R Davies, P Hamilton - Education 3-13, 2016

This research suggests that assessing children in the outdoors is not used to its potential. Factors impeding the use of the outdoor classroom include: lack of appropriate resources; level of staff expertise; child-staff ratio; adverse weather; and changes to curriculum policy which place emphasis on the formal assessment of children.

iPaddle-Incorporating the Use of iPads® into an Outdoor Education Curriculum

SG Fillmore - Thesis University of Minnesota Duluth

There is little information on how to effectively incorporate the use of iPads ® (tablet computers) in an EE setting. The purpose of this project was to write curriculum designed to take advantage of iPad technology. This project resulted in recommendations for including iPad applications (apps) that may strengthen portions of local watershed lessons.

<u>Lighting a fire of change?: characterizing the learning process in a German non-formal education for sustainability network and examining the outcomes</u>

CA Mössner - Master's Thesis Series in Environmental Studies and ..., 2016

This case study aims to understand how JUBiTh (Youth Environmental Education Thüringen) as a German non-formal EfS network understands and implements EfS, how the learning process is characterized from the perspective of students and facilitators and whether workshops enable youth to become agents of change.

Principles for designing environmental education programmes: A literature review

E Soini – Liana-ry.org 2016

From Schools to Nature: Bridging Learning Environments in Israel

T Tal – Chapter in Science Education Research and Practice in Asia, 2016

This chapter portrays the history of out-of-school education in Israel from the early 1900 to 2000. In 1960, the new science curriculum shifted part of the out-of-school learning into more inquiry-learning oriented models. In parallel, teachers became less engaged in their students' out-of-school learning, while informal science and environmental organizations offer their services to the education system.

The Effect of Active Learning Based Science Camp Activities on Primary School Students' Opinions Towards Scientific Knowledge and Scientific Process Skills

MNA AYDIN - International Electronic Journal of Environmental ..., 2016

The purpose of this study is to examine the effect of active learning based science camp activities on sixth, seventh and eighth grade students' opinions towards scientific knowledge and scientific process skills. Significant difference was found supporting the students' post-test results of scientific knowledge survey.

Nature Imagery in Non-Green Advertising: The Effects of Emotion, Autobiographical Memory, and Consumer's Green Traits

P Hartmann, V Apaolaza, M Eisend - Journal of Advertising, 2016

Images of pristine nature constitute frequent elements of visual advertising design. Based on environmental psychology theory, the research analyzes the effectiveness of the use of nature imagery in non-green advertising and the underlying processes involved. Results indicate these processes are moderated by consumers' green traits.

REPORTS

The **Land Trust** has commissioned an <u>independent study</u> about the value of its green spaces. The aim is to gather evidence on how much local people value green space and how much green spaces can benefit the wider society.

The **Design Council** has published an <u>evaluation report</u> authored by NEF Consulting on its Knee High Design Challenge. It highlights key outcomes of the teams awarded final funding in terms of their achievements on the programme and the impact that their products are having on child health.

A consortium led by **IEEP h**as recently completed a <u>study on the health and social benefits of nature and biodiversity.</u>

Education Scotland have published their Learning for sustainability report

The National Gardens Scheme commissioned The King's Fund to write an independent report on the benefits of gardens and gardening on health. The report includes a 'menu' of recommendations that aims to encourage the NHS, government departments, national bodies, local government, health and wellbeing boards and clinical commissioning groups to make more of the diverse health benefits of gardening in support of their priorities.

The Science and Technology Select Committee inquiry into UK Science Communication is still accepting submissions, if you have not yet sent anything. You can see evidence that has been submitted and submit your own evidence on the-inquiry website.

RESOURCES

Sport England released their <u>new strategy</u> recently which placed a big focus on engaging the inactive with sport and physical activity. The new strategy places an emphasis on the wider impact of sport and physical activity - physical wellbeing, mental wellbeing, individual development, social and community development and economic development.

New Book: Green Exercise: Linking Nature, Health and Well-Being

Edited by Rachel Bragg, Jules Pretty - contributions by Bianc Ambrose-Oji, Liz O'Brien, Sue waite, Mat

white and Neil Mapes

The concept of Green Exercise has now been widely adopted and implies a synergistic health benefit of being active in the presence of nature. This book provides a balanced overview and synthesis text on all aspects of Green Exercise and integrates evidence from many different disciplines including physiology, ecology, psychology, sociology and the environmental sciences, and across a wide range of countries.

<u>Public Health England – active travel paper</u> contains some good evidence to support increased activity from a health perspective and highlights the benefits of switching away from motor cars. It has been written for transport planners, others concerned with the built environment, and public health practitioners. It looks at the impact of current transport systems and sets out the many benefits of increasing physical activity through active travel.

ECOS: A Review of Conservation - an open access issue available until the end of June

ECOS is an interdisciplinary environmental journal with a focus on conservation thinking, published by the British Association of Nature Conservationists. The Open Access issue covers a breadth of nature conservation-themed writing, including environmental education, rewilding, evidence-based policy and landscape-scale conservation.

Public Health England Tools and Data Updates

- Adult obesity data slide set
- Child obesity data slide set
- Anonymised record level data from the NCMP 2014/15
- Health Survey for England 2014 data and report
- Adult and child diet data factsheets

Early years physical activity factsheets from the British Heart Foundation including

- Sedentary behaviour in the early years
- The importance of physical activity in the early years
- Current levels of physical activity in the early year
- Top tips for getting under-fives active
- Early years physical activity guidelines

Manchester Metropolitan University has now joined the 'Dissertation for Good' scheme which is organised by the NUS (see http://dissertationsforgood.org.uk/). It aims to match the research interests of undergraduate students with organisations/charities who have a need for small scale research projects. Instead of producing a project/dissertation which is for internal marking purposes only, students now have the opportunity to be involved in real world research that might have some impact and benefit.

SEMINARS AND CONFERENCES

This seminar will examine the role of outdoor environments in supporting physical activity and associated health and wellbeing amongst older people.

Land of Opportunity: Growing futures in land-based education

School farms conference 16 & 17 September Royal Agricultural University, Cirencester

Communicate 2016: Swapping Spectacles

2 - 3 November

Communicate is the UK's environmental communications conference, returning to Bristol in 2016, and this year exploring the challenge of walking a mile in someone else's shoes and looking at the world from another perspective.

Science in Public 2016 Conference

13 - 15 July

The annual Science in Public conference is an occasion for cross-disciplinary debate and discussion and a forum for sharing all work considering the relationships between science, technology, medicine and their multiple publics.

Engage Competition 2016

Are you involved in public engagement with research? Have you worked on a brilliant project that you want to share? The Natinoal Co-ordinating Centre for Public Engagement Competition is back for 2016 and open for applications. The NCCPE are running this national competition to find and celebrate high quality public engagement with research projects.

British Science Festival

6 - 9 September, Swansea

The British Science Festival is Europe's longest-standing national event which connects people with scientists, engineers, technologists and social scientists.

MSc course

Edinburgh College of Art (ECA) is launching the <u>UK's first postgraduate programme focusing solely on the importance of the environment for human health and wellbeing</u>. The programme will run for the first time in September 2016. For further information, contact the OPENspace research centre <u>OPENspace@ed.ac.uk</u>