



Learning (Outdoors) for Our Future

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Abstract

This paper considers the role of the early philosophical advocates of trusting to experience as a means of understanding oneself and the world around and sets their contributions into the context of the complexity of learning and decision making in modern society. It argues that outdoor (experiential) education should embrace this complexity and that in doing so a number of stimulating educational possibilities emerge. To adapt to this challenge outdoor education provision should address the *dispositions* of the learners and the value contexts in which they learn. The argument is further developed that 'taking responsibility for one's actions' should be an important educational goal for outdoor educators and that programmes should be designed to achieve such learning outcomes through the use of independent learning experiences of longer duration than are commonly found in contemporary programme design. Furthermore, realising the limits to what can be learnt through direct experience allows recognition of the role of critical reflection on knowledge, understanding and personal decision-making.

For this particular approach to education to be accepted and valued by society and policy makers it must be demonstrably relevant, and this represents an additional challenge for its proponents. In light of the philosophical argument that experiential learning can develop a wide range of independent learning skills, addressing such challenges may prove attractive to educational policy makers wrestling with the difficulties of providing realistic and relevant education in the 21st century.

Society now faces a number of major issues about which early educational philosophers were wholly unaware. This paper argues that to make outdoor education relevant to the needs of modern society a focus on *education about* and *action on* the 'big issues' of the day, and in particular global climate change, is an imperative for action that outdoor educators are well equipped to address. Nonetheless attitudinal development is not enough on its own, as to be effective in action requires knowledge, and therefore programmes require content.

The paper has been informed by a wide range of literature, some of which is available through the Department Website:

<http://www.education.ed.ac.uk/outdoored>

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Introduction

Thank you very much for the invitation to make this presentation. When I started working in the outdoor education sector I was in awe of the people who ran the centres I aspired to work in and so I reacted to the invitation to make the presentation with some considerable surprise. It is a great privilege to present this paper, and as you will see it reflects both my personal commitment to 'the outdoors' and my professional experience in outdoor education practice and theory.

I am also head of a department, which has taken an experiential approach to learning outdoors (outdoor education and environmental education) for over 35 years, making its postgraduate programme the longest running of the type in the world. In academic and research terms the staff in the department could best be described as 'devout sceptics'. We believe in but feel compelled to question both 'outdoor education' and its favoured educational justification 'experiential education'. A flavour of this is apparent in the paper too.

In order to understand what drives the arguments I put forward here and also to unpick and critique them you also need to know a little of my background and my motivations. I grew up in a small rural town in the south-west of England in a family where gardening for food, work and recreation in the countryside were taken for granted as the norm. Through these early experiences I developed a love of community, the countryside, the natural world and my journeys in it. I further developed these through my schooling (and in particular a dedicated teacher) but also a love of learning and a fascination with education. Whilst I was trained as a physical scientist, biologist and ecologist, in later years I have become absorbed by the social sciences including the social history and socio-economics of wild land (in particular the Highlands of Scotland). Much of my professional career and personal life has been spent in the outdoors and so outdoor education is a central feature. In summary the key themes of people, place and (outdoor) activity together with the educational possibilities of the relationship between these continue to characterise my life. I am the product of these experiences and in much of what follows these themes will interweave.

Definitional issues

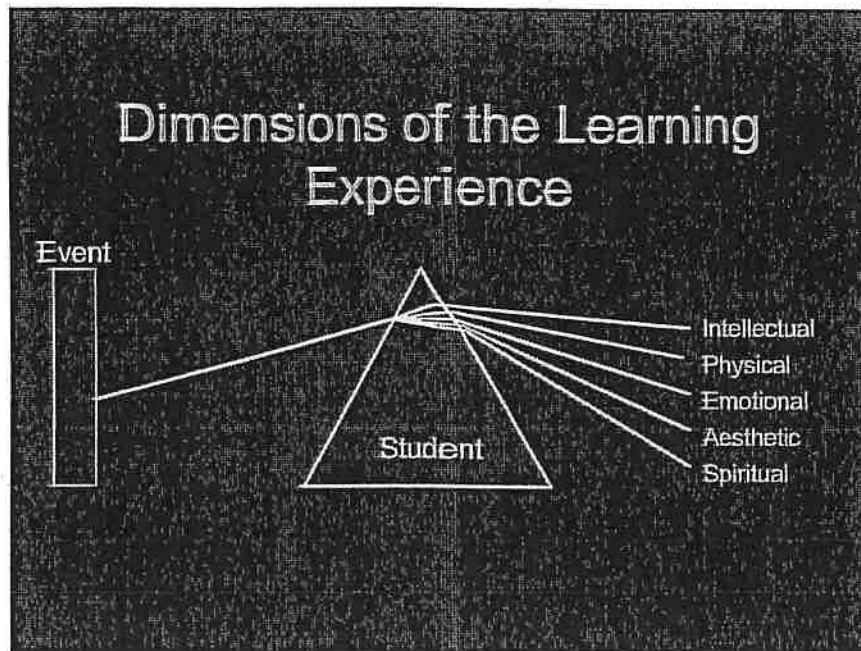
In this paper I tend to use 'experiential education' and 'experiential learning' interchangeably and both of these refer to the process by which we learn. Clearly what matters most is that students learn effectively, and so the educational process (experiential or otherwise) should optimise opportunities for doing so. There are indeed precedents in some cultures where there is little distinction between teaching and learning. For example in the Welsh language 'dysgu' means both to teach and learn and need to be placed into context to explain the different roles of the teacher and learner.

Rydwr n'dysgu fel athro
Rydwr n'dysgu fel myfyrwyr

I teach/learn as a student
I teach/learn as a teacher

Here both the teacher and learner engage with the same (learn/teach) process but just in different roles².

In terms of the kinds of learning we/students can engage in there are several dimensions to the learning experience. In the past I have tried to represent this visually as light passing through a prism.

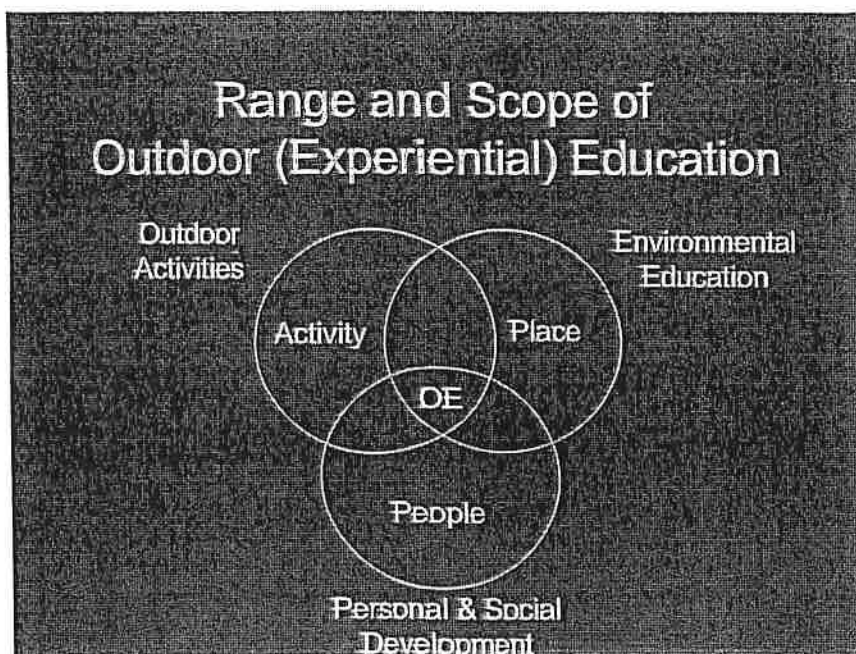


I should also say that in the UK and to a large extent Europe too the term 'experiential' is in widespread use in education in general and those involved in education see this as an approach to education rather than a 'movement for change'. This is of course a very different situation to the one in which Hahn and other 'activists' operated.

Outdoor education is seen by many within and outside of the sector as being very closely associated with experiential approaches to education. Some of the reasons for this are obvious but others less so. It arose, was encouraged and became formalised by the 'educational establishment' (partly through Education Acts) as an *experimental* educational endeavour in the 1940s to the 1960s (see Higgins, 2002). This has influenced and been influenced by the concept of 'experiential education' and constitutes much of my own experience of the field and this is reflected in this text.

The relationship between 'people, place and activity' is central to educational transactions in most formal and semi-formal educational settings. The relationship between people and place and people and activity define (to a large extent) the content and relationship elements of student learning. However in outdoor education this is even more significant than it is in other educational contexts. We put forward this way of thinking about this some years ago and it is not in widespread use in many countries.

² However in contrast in Scottish Gaelic there are a number of terms for learning and teaching, and as with Welsh some can be used to mean both learning and teaching, though some are exclusive to one or the other.



Hahn in context

It is not my purpose here to review the life of Kurt Hahn (1886–1974) and his background and motivations. However some consideration of the times and circumstances of his most significant developments is pertinent to the propositions and argument I wish to make. In particular I would like to make note of the fact that just as the experiential education movement is influenced by Hahn (and John Dewey (1859–1952)), they too were influenced by other educational philosophers of considerable stature.

The formative influence of a holiday in the Dolomite Mountains (in 1902 when Hahn was 16) is widely reported in the literature on Hahn. Apparently he met boys from Abbotsholme School (a small fee-paying school in England³) and learnt from them and later read of the educational philosophy of the inspirational and radical Scottish headmaster, Dr Cecil Reddie (1858-1932). This led to a fascination with educational philosophy which was to last a lifetime, and it can easily be argued, a train of events which led to Gordonstoun School (and the Round-Square Schools Association), Outward Bound, and the Association for Experiential Education etc.

But of course Reddie was himself influenced by others and notably by Sir Patrick Geddes (1854-1932) – a Scottish polymath (biologist, sociologist, town planner, educational philosopher, diplomat, peace campaigner⁴). Geddes was a man of prodigious talents and was accomplished in each of the areas noted above, but perhaps his greatest contributions were in thinking of people living and working in harmony with their communities (he used the epithet '*place, work, folk*') and also the role of education in holistic development. His philosophical arguments also led to the development of the concept of 'environmental sustainability'⁵

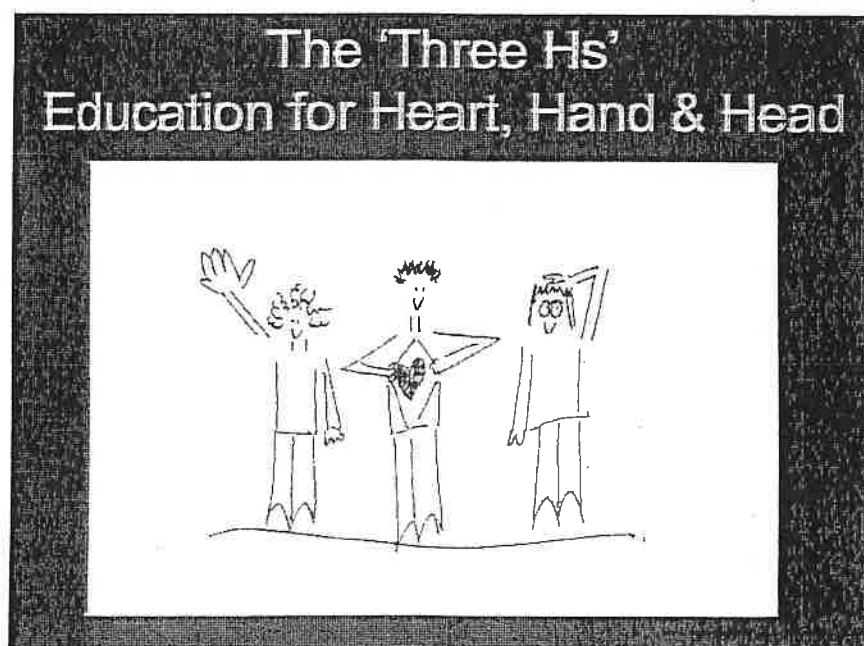
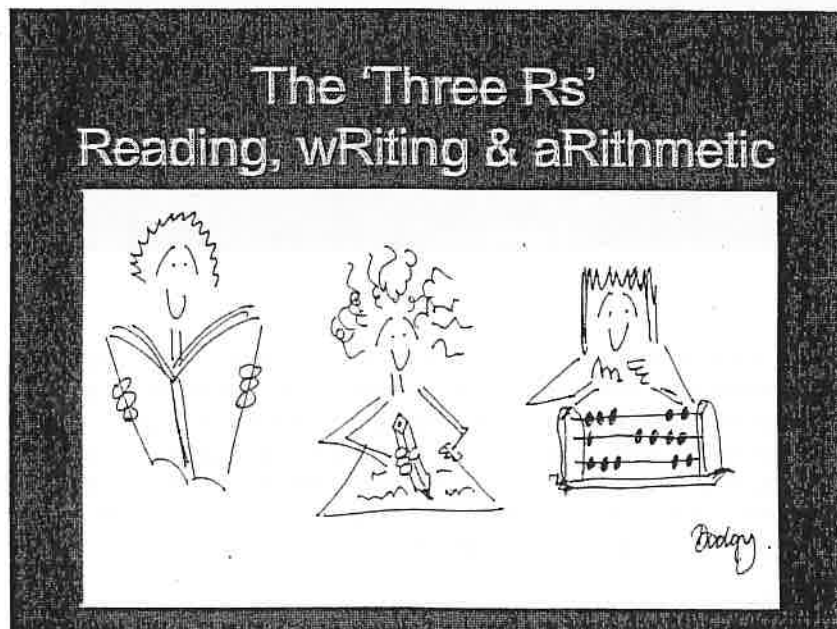
³ <http://www.abbotsholme.com/background/history.asp>

⁴ See Boardman (1978), Meller (1990) and Stephen *et al* (2004) for recent biographies and critiques.

⁵ In doing so he placed himself amongst a number of influential Scottish environmental thinkers including John Muir (the pioneer of the national parks system), Frank Fraser Darling (nature conservationist and human ecologist) and John Smyth (ecologist, environmental educator).

(even though he did not use that term) and notably the sentiment much beloved of environmentalists, to *think global, act local* which pervades his arguments in his major work, *Cities in Evolution* (1915).

In common with other educational philosophers like Comenius (1592-1670) and Pestalozzi (1746-1827) Geddes' holistic approach to education was based on learning via the 'three Hs' - 'Heart, Hand and Head' (Boardman, 1978, p. 224) rather than the 'three Rs' (Reading, wRiting and aRithmetic). This approach has been suggested by educationalists before and since Geddes, though he emphasised affective, physical and intellectual development (insisting *that order of priority*), a framework that fits well with experiential education.



The spheres of influence of these individuals is also evident in that Geddes also knew John Dewey (and it seems likely that they each had an impact on the

other's thinking) and there was also extensive correspondence between Geddes and Lewis Mumford (1895-1990) the well-known American cultural critic (Geddes, Mumford and Novak, 1995).

The period in the late 19th and early 20th Centuries was clearly a vibrant time for educational thought with powerful intellectuals applying themselves to ideas which were highly significant in the development of the 'progressive schools movement' and other developments in experiential education.

There are other reasons for considering the contribution of these influential thinkers. In particular I have often found myself wondering what caused this 'creative explosion' and when we might see the next one or the next 'paradigm shift'. If so what will cause it and where will the philosophers come from? It is in part my interest in the development of experiential education that will be the focus of much of the remainder of this argument.

What is experiential education good for?

I can swim – I just don't know how yet
(Jamie (9-years-old) when asked if he could swim)

Learning is messy ... we rarely learn anything by proceeding along a single path to pre-determined outcomes
(Scottish Consultative Council on the Curriculum, 1996, p. 9)

The idea that we learn through experience and that teachers/facilitators should provide students with opportunities to do so seems self-evidently true (at least to those of us who have built a life and career on it). Our individual success in surviving the many developmental challenges of our early years, by guided discovery of the world through our senses, is testimony to the power of experiential learning. Parents soon learn (through experience) that whilst they can support this sensory learning process they cannot control it. This is true of the development of intra-personal and inter-personal skills where development relies on reflection on experiences arising from interactions with others. There are also many aspects of 'school-work' which lend themselves to experiential learning and teaching, notably art, music, elementary science etc; though it is important to remember that such approaches are also used by teachers of other disciplines from mathematics to history⁶. This of course was a premise of Reddie when he established Abbotsholme and Hahn when he established Salem and Gordonstoun.

There are other elements of learning that are comforting for experiential educators too. In the early years of a child's development he or she sees no subjects let alone boundaries between them. For example an event may involve verbal, visual, auditory, tactile or a mixture of these; whilst in schooling a variety of subjects may also be taught holistically. A child-centred approach is often taken, though usually within the confines of the classroom.

In later years the curriculum is divided into a number of subjects which fit within structures in the school. The premise is that at higher levels the subjects are more technical (and hence a specialist is required) and that this strategy breaks the curriculum into manageable chunks for the student. When student knowledge is assessed this generally occurs under the subject headings rather than in an integrated manner through project work. Unfortunately for experiential educators, in the UK at least, fears of plagiarism and cheating (primarily because

⁶ For examples see Wurdinger, S. (2005) 'Using experiential learning in the classroom'.

of increased access to the internet) are moving examination boards even more vigorously away from such forms of assessment.

So interdisciplinary and holistic learning through various senses, dealing with the complexities of the social and physical world around us seems to be what experiential learning is good for. This complexity is just the way the modern world is, and so as educators we would like the next generation (and if possible the present one) to be able to comfortably address complex issues. If this is the case why isn't all education experiential?

The limits to experiential education?

I would like to explore this issue in the context of the complexity of knowledge in today's world. It is tempting for advocates of experiential education to posit the view that if there are limits to experiential education it is the result of the approach taken to narrow forms of discipline-based teaching in schools and that these lead to 'compartmentalising' knowledge. Hence the lack of experiential approaches is not so much a lack of imagination as a tendency of the system.

However there are 'knowledge issues' which should at least cause us to ask if there are limits to what we can know experientially? I will explore examples of these below but before I put forward my own thoughts, I should defer to Dewey who in 1938 pointed out that clearly we cannot know 'the past' experientially (Dewey, 1963, pp. 22-23) and that if we reject this form of knowing we cannot use it to inform the present or future. Where would we be without knowledge of the past to inform the present?

Furthermore our lived experience makes it abundantly clear that there are many complex issues are to be dealt with in our personal and professional lives. We have a tendency to seek ways to simplify them, perhaps by breaking them into smaller parts – perhaps not the most appropriate experiential approach. Consideration of facets of this complexity and the inter-relationship between these offer insights into the limits of experiential education (see also Higgins, 2003).

First let me suggest that my experience in presenting this lecture is an exercise in dealing with 'social complexity'. We all have different backgrounds and experiences and yet we learn to communicate and empathise with each other. Whilst we do so through a multitude of personal experiences it is clearly possible for a skilled experiential educator to help us to further develop appropriate personal and social skills. A similar argument could be applied for example to learning the 'complex physical skills' to cope in a kayak in turbulent moving water situations. A 'coach' can provide input only to support another and more demanding teacher, namely the river. In these situations where experiential educators may be recognised as having significant skills there are clearly limits to the likely effect of even highly focussed inputs.

What however of complex scientific and technological developments, the pressure of global marketing or of the politics of the modern world? In all such cases it is very difficult to 'know' the issue or the argument experientially. And yet we (at least those of us in 'developed' countries) can gather information about any of these issues more easily than ever before through the internet. Of course developing such skills requires an experiential approach and the issue of 'gathering information' and how to deal with it will be the focus of discussion later.

My flight to the meeting in an aeroplane is an excellent example of 'complexity'. Without relying on a ground-crew and air-crew (who are I hope not learning everything through experiential processes!) My journey would have been impossible. I have no obvious experiential way of knowing anything much about how the plane flies to its destination. Nor can I know experientially, the impact of this flight on the atmosphere and on global warming.

I could raise similar issues about the 'simple' issue food and drink. For example what is the social and environmental impact of drinking coffee (where does it come from, how is it grown, what is the impact on the landscape and community, at what environmental cost does it arrive in our shops etc). Similarly why should I buy cans of 'dolphin-friendly' tuna? What is the impact on dolphins of catching tuna in a different way? What is the effect on other species (are seabirds, notably albatrosses, killed by the switch from nets to baited long-lines? Perhaps more fundamentally why is 'tuna friendly dolphin' not on our supermarket shelves and how would we react if it were?

So in addition to the general complexity of modern life there are other compounding factors such as the fact that the environmental and social impacts of the production and also our use of many products are distant from the point where we use them, and that the cumulative effect may not be evident until much later.

The point is really this. Where experiential approaches to learning are not appropriate or the learning experiences are inaccessible, what learning strategies are appropriate? If I can't trust my own senses what can I trust?

Perceptions are not always reality

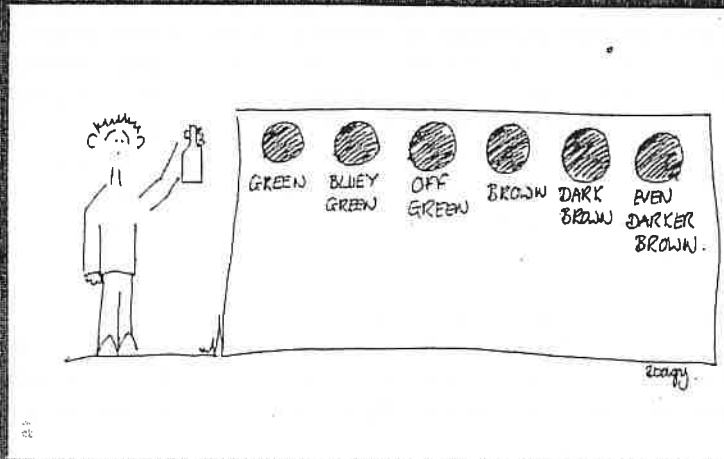
Learning experientially can also be misleading if the information available is limited or incomplete. In such circumstances we may not know that our perceptions lack some vital piece of information. This occurs in experiential learning situations when dealing with inter-personal relationships where assumptions can easily be made about another person's behaviour. It can also happen when we lack a piece of information, as in the case of this person who took the trouble to write to the local newspaper about the local drought.

'We are told that the water levels in our reservoirs are dangerously low. I just cannot understand what all the fuss is about. Why not simply fill these reservoirs up from the mains?'

Letter to The Poole Daily Echo newspaper
(South of England - April 1997)

Whilst the flaw in this is obvious if one has basic knowledge of the water cycle, it seems probable that the author has not been party to this information. Such an understanding can be gained by being given clear access to the information, or perhaps partly by experience if one has the opportunity to visit water treatment works etc. Incidentally such misunderstandings are likely to increase as, at least in the UK it is now very difficult to arrange educational visits to such places because of fears over 'Health and Safety' issues.

Sustainability and Complexity

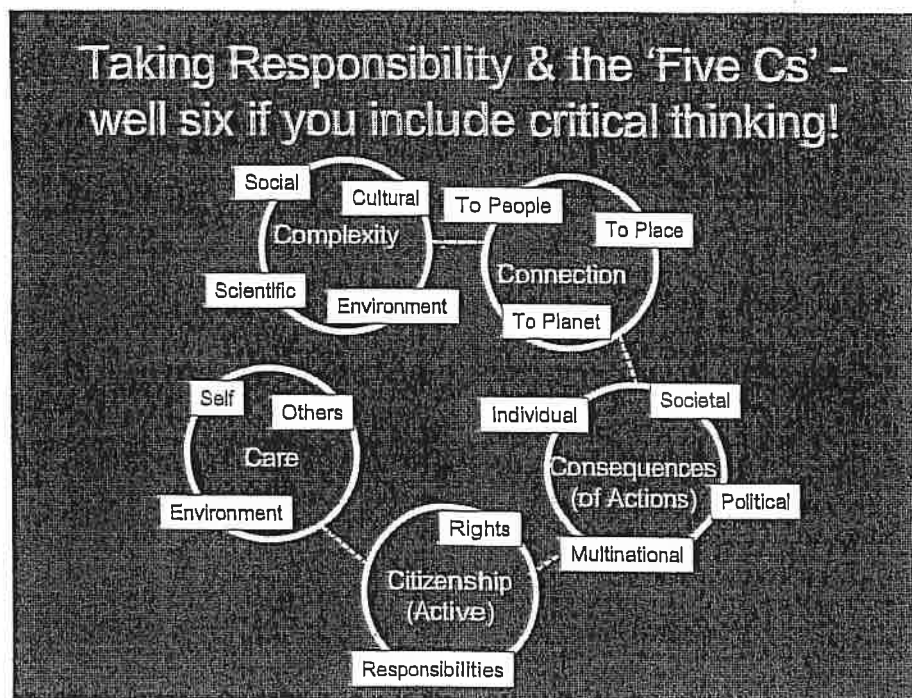


Connections and consequences

These notions of complexity and of perceptual difficulties leads me to consider the notion of 'connection'; connection to place, to people, and to planet. One reason I argue that developing a connection with place is an important aim of experiential programmes is that it allows a range of other responses (a care or stewardship ethic etc) but also that it provides a start point for relationships (connections) with people within a local community. This is the basis of robust and durable relationships which can allow further developmental outcomes such as understanding the consequences of one's actions and an ethic of citizenship and care (see Higgins, 1996a/b for further discussion).

Paradoxically a characteristic of many experiential education programmes is that they often seem to take place somewhere distant (often in the countryside) from where the participants live (often in a city). In these situations building a sense of 'connection' and 'consequence' is difficult to achieve. Indeed efforts to do so may even be counterproductive as the participants develop relationships with some place other than 'their own place' and with people they may never see again. In such cases experiential educators justify what we do by saying we are 'modelling' the reality, but this seems little compensation for a loss of authenticity.

However if these *connections* can be made and understanding of *consequences* to actions is developed, an ethic of *citizenship* (where rights and responsibilities are understood and exercised) and *care* (for self, others and the environment) may result. The dominant ethic implied by this model is one of 'taking responsibility' for one's actions, and this will be discussed in more detail later.



Whilst this may occur through individual reflection, like other educational aspirations it deserves considered input from skilled educators, including or perhaps particularly experiential educators. Whilst understanding of these 'five Cs' may be difficult to include in programme design it is perhaps no more so than many other aspirations educators have for their students. The potential benefits of doing so are substantial and in my view a priority which should be borne in mind in the selection of locations for and organization of programmes.

Maintaining a critical guard⁷

So if experiential education is good for some things and less good (or inappropriate) for others, and if we cannot always trust perceptions, does experiential education have a more extensive role than it does at present? I believe it does and that there are great benefits in doing so.

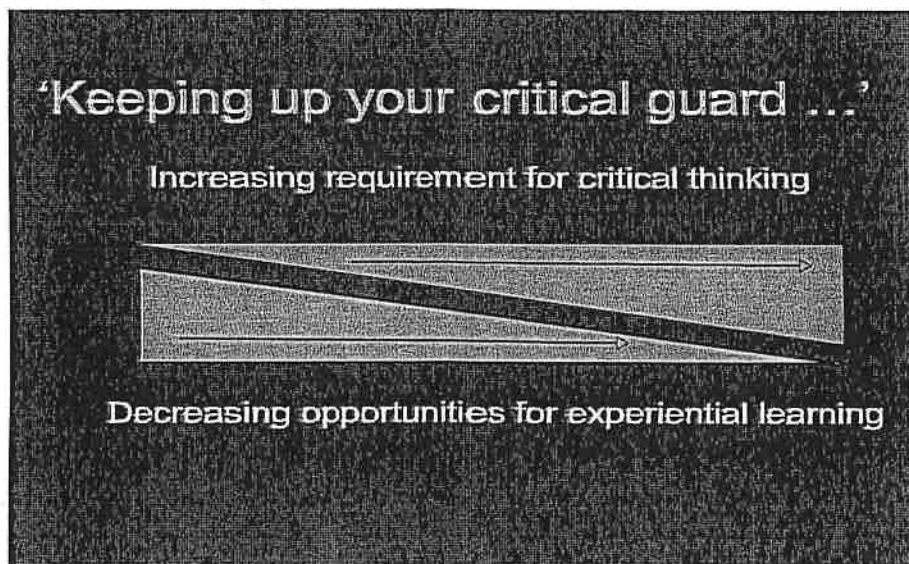
The first step is to recognise that experiential education often has a reflective element which allows the learner (and the educator) to review the experience. This is of course a part of what is often referred to as the 'Kolb Cycle' (Kolb and Webb, 1975) and its variants. Although this may have philosophical inconsistencies and practical difficulties (see Webb (2003) for an important recent critique) it is nonetheless much beloved by experiential educators, and at least a reflective approach is appropriate for certain aspects of learning and development. Personal reflection and critical examination are not that far apart as both require making an effort to think and challenge. Taking a critical approach is even more relevant to the things it is difficult or impossible to know experientially.

In the examples cited above (eg air travel, coffee, tuna, global warming and others such as 'healthy eating') the consequences of actions are not immediately evident and so in order to understand the processes and implications we need to

⁷ This is an exhortation by my colleague Dr Barry Smith used regularly when teaching students

rely more on critical examination than experiential processes. These and indeed many issues of the modern world may be all the more difficult to fully understand because they are obscured, hidden or may even be subject to forms of misinformation by 'vested interests'. In such cases it may not be possible to truly 'know' what it is one is seeking to understand, though that should not stop us trying to do so. Getting as close to an understanding of major issues (eg the causes and reality of wars, the claims of politicians, the impact of religious fundamentalisms etc) is in my view a responsibility of us all as citizens, educators and parents. To do so we have to weigh up the information, evidence, the trustworthiness and authority of the sources, and that requires careful critical examination of the issue.

Rather than see this as 'sidelining' experiential education I think it provides a guide to one way in which experiential education is carried out (see below), opportunities to engage with broader issues, and to develop critical thinking skills which will be valuable throughout life. Nor am I setting up an 'either/or' dichotomy. I prefer to think of some issues as lending themselves to one approach or the other, but many (if not most) issues will profit from a balance (weighted in favour of the experiential in some cases and the critical in others) of the two. The following figure represents this but should not be narrowly interpreted.



As experiential educators we must also engage in this critical process concerning our own work. For a variety of reasons we have only recently begun research on anything but a trivial scale. This is unsurprising considering the fact that what we do is rarely considered 'mainstream' and so funding for such work is difficult to find. If we consider *learning outdoors* (where much experiential education takes place) as the *corollary to learning indoors* the comparison is stark in quantity and depth of research. We have a lot of catching up to do but the possibilities are enormous. However we should take note of what research does exist about experiential processes in whatever field the research was done, whether in conventional educational settings, in outdoor education, in psychology, outdoor management development etc. Collaboration with specialist researchers in these fields would open up considerable possibilities for all and would make a considerable contribution to our fields.

Education and recreation

At the same time as we endeavour to develop critical reflection in our students we need to keep up our own 'critical guard' and make sure we don't become 'commodified' by the commercial world. Here there are substantial issues in need of critique and policy review (particularly educational policy). It is not the purpose of this paper to do so but briefly, difficulties do arise because the terms 'experiential education', 'outdoor education' and 'outdoor recreation' are often used interchangeably. In my view whilst experiential educational approaches can be used in indoor and outdoor education, close association with outdoor recreation can lead to the impression that the educational elements are not the substantive issue. This in turn lays the fields open to too close an association with personal (leisure time) outdoor recreation. This is big business all over the world now and it is easy for those working in experiential and outdoor education to simply reflect the commercial imperatives and become part of the commercialisation rather than to develop the skills in their students to critique it⁸. For my own part one of the reasons I work in education is that I wish to do this rather than become involved in an 'industry' which like other industries generates 'competitiveness' with others in the field, which in turn leads to an assumption that we have to give the 'clients' 'what they want'. Clearly this is fine for recreational programmes in holiday periods or at weekends, but I cannot see the justification for this if the programme takes place in or out of school during school time. If this seems harsh just for one moment try to imagine a head teacher or principal justifying this approach to schooling.

Taking responsibility

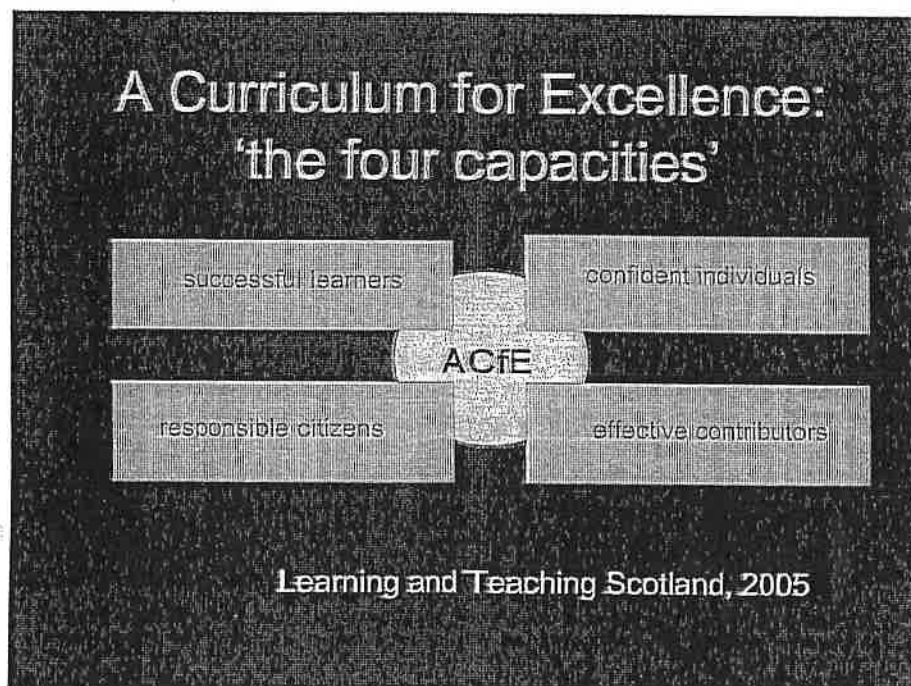
Implicit in the argument above is that any mature educational process should help students learn how to make judgements about the validity of evidence (in part based on the value-stance of the sources) and their own experience. In this process educators are forced to consider the relationship between experiential education, critical evaluation and personal value systems. Whilst I have argued elsewhere that we should not impose a value system on students (Higgins, 2000) and that the development of and critical reflection on one's own values is a fundamental part of the process, the development and adherence to values is a key issue in education. Without this the intent and direction of experiential and other approaches to education is not transparent and the outcomes unpredictable.

For example how many experiential and adventure programmes assert that they develop self-esteem in those they work with? In my experience this would certainly be a majority. But take for example the case of a young-person stealing cars for the purpose of 'joy-riding'. If he (and it usually is 'he') is good at it he will enjoy his success, his friends will recognize his skills, their respect will re-enforce these feelings and he will experience enhanced levels of self-esteem through this activity. What is missing from this process is for the learner to be able to distinguish between something educative and (in Dewey's terms) something mis-educative (Dewey, 1963, p. 25). Simplistically seeking the raise self-esteem through experiential programmes may well be hazardous, and there it is important for the teacher/facilitator to provide a structure to help young people learn from their experiences in a way that the values context is not left to chance. In essence this dimension of the learning process is a willingness to address values issues and to encourage individuals to take responsibility for their actions.

⁸ For a more detailed argument see Higgins (2003).

Adopting 'taking responsibility' as a central theme provides educational opportunities to consider this as an approach in other aspects of life. In particular raising awareness of the consequences of actions and taking responsibility for them is vitally important in both local and global citizenship. Such an approach is pertinent to the 'big agendas' of the modern world such as sustainability, citizenship and personal health. This has recently become a feature of a new curriculum in Scotland.

Following a recent national review of education the Scottish Parliament has through its educational advisory agency (Learning and Teaching Scotland: (<http://www.ltscotland.org.uk>) embarked on a major initiative - A Curriculum for Excellence (ACfE). In future much less emphasis will be placed on a subject-oriented curriculum and in preference the personal skills and attitudes of young people are to be the central theme. The intention is that schools will encourage young people to develop four 'dispositions', to become 'successful learners', 'confident individuals', 'responsible citizens' and 'effective contributors' (<http://acurriculumforexcellencescotland.gov.uk/index.asp>).



Whilst this seems laudable (especially to experiential educators perhaps) the inculcation of such skills is clearly difficult for schools to deliver and demonstrate. Perhaps as a result of the reputation of outdoor education as an approach which deals with personal and social educational issues like these, the government has encouraged the outdoor education community in Scotland to address these issues. It has provided support in the form of an initiative called Outdoor Connections and a major research programme (which we at the University of Edinburgh and others) have recently completed. As part of the work of the 'Outdoor Connections' programme staff at the Government's education development agency 'Learning and Teaching Scotland' have, through analysis of research identified ways in which experiential outdoor education might deliver these kinds of developmental outcomes (see the Outdoor Connections website: <http://www.ltscotland.org.uk/takinglearningoutdoors/index.asp> for details). However these are early days and it is not at all clear how this community will be expected to contribute. At present there is the political willingness to engage but those of us in the experiential and outdoor education world must be ready to say

what we would do, why we would do it, and what the outcomes are likely to be. As we lack a well developed, coherent, consistent philosophy and a substantial research base we are some way off this yet, but we are, albeit slowly, moving in this direction.

How do we develop skills in 'taking responsibility'?

Rubens (1997, 1999) conducted qualitative research on links between outdoor education, adventure and learning, and set his findings in context through a comprehensive review of the educational and psychological literature. He argued that the literature on motivation in learning suggests the value of a 'mastery' approach and contrasts 'narrow' and 'broad' views of adventure. 'Narrow adventure' experiences are short duration activities which focus on high thrills (zipwires, ropes courses, abseils/rappels) but require little effort on the part of the student who takes little responsibility for his or her actions. He contrasts this with 'broad adventure' which provides the converse, but most notably requires the student to take responsibility for their actions and sustain effort. Such activities are characterised by, for example, journeys (eg by canoe or on foot). Rubens makes a strong case that 'broad adventure' encourages a 'mastery' approach to education which leads to a willingness for students to take responsibility for their actions in later life. From his review 'narrow adventure' appears not to produce these benefits.

Narrow & Broad Conceptions of Adventure	
	Rubens, 1997
Narrow View of Adventure	Broad View of Adventure
• Short timescale of experience • High thrill challenges • Little or no effort involved • No responsibilities devolved to students	• Long timescale of experience • Many challenges varied in nature • Some or much effort involved • <i>Responsibilities devolved to students</i>

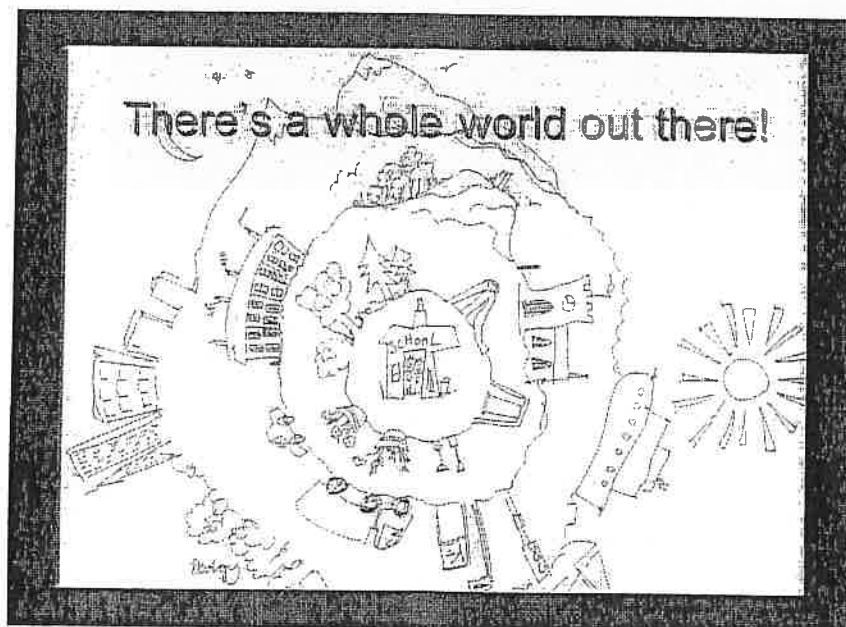
This is not an argument that says that all experiential education activities need to be based on 'broad adventure', but it is a challenge to 'narrow adventure'. It does however suggest that if 'taking responsibility for one's actions' is an educational goal then adventurous experiences which are broad in nature are better than those which do not have these facets. (For a more detailed discussion of this see also Higgins, 2003). Until recently there appears to have been no empirical research on the relative merits of 'narrow' and 'broad' outdoor experiential activities. However in a recent study Tay (2006) found that students on such a programme reported the experience of lighting a fire and cooking food on it as being far more challenging and educationally worthwhile than what he termed 'adrenaline activities' such as ropes courses.

Teaching today? Have you left your ego at home?

With regard to the proposition that we should engage with 'the five Cs' and make 'taking responsibility' an educational aim there are implications for those of us who choose to work on these broader educational outcomes. It requires a willingness to trust in our students, to be less of a focus ourselves in their learning process; to depend less on simplistic models of input, process and predictable outcome; to accept uncertainty, and to find ways of working with this. As ways of making this plain to our postgraduate students I suggest they should think of themselves in their teaching role not as 'big people in a small (educational) landscape but rather, as 'small people in a big landscape'. There is no role for a 'big ego' in such a landscape or teaching situation; the focus must be on the learner. I also ask them to think about Paulo Freire's assertion that 'the important thing is to educate the curiosity through which knowledge is constituted as it grows and redefines itself through the very exercise of knowing' (Freire, 1998, p.31). Such an approach is both respectful of the 'direction of travel' of education (from dependence towards independence) and provides great opportunities for experiential educators to encourage curiosity.

The politics of teaching in the big wide world

What is clear from the Scottish initiative is that 'taking responsibility' for one's approach to learning, to society and for one's actions is to be a central theme. So it seems the educational world (at least in Scotland) is as I would wish it to be. Well it isn't quite that straightforward. It is unlikely that there will be too much difficulty in developing this approach in 'early years' education but from the age of about 13 the subject specialisms become a central feature of the educational landscape. Here subject content matters and experiential approaches will have to fit in with the disciplines students are learning. Again here it seems that 'maintaining a critical guard' would be a worthwhile contribution to the educational process. If experiential and outdoor educational approaches are to prove influential these may at some points in the students' school life be a radical alternative but at others complementary to mainstream education. In our experience in Scotland any lobby seeking political support for experiential education will require to develop mutual understanding and some collaboration with mainstream education communities to have any hope of gaining ground.



In England too there is increasing support for education outside the classroom and in the past two years there has been a Parliamentary enquiry and an active 'Real World Learning' / 'Education Outside the Classroom' campaign to re-invigorate this approach to education. Political interest in this has been stimulated in part because of a number of public perceptions, eg that children are increasingly separated from the natural environment, that they have little opportunity to learn to deal with risks in modern society, that they exercise less than they should and that aspects of their personal and social education would be enhanced by such experiences. The campaign has involved the sector working with politicians and civil servants to produce a 'manifesto' for 'Learning Outside the Classroom'. The outcomes were published at the end of November 2006 (<http://www.dfes.gov.uk> and <http://www.teachernet.gov.uk/learningoutsidetheclassroom>).

One lesson to be learnt from these efforts is that building support for educational developments requires consensus building across a range of communities of interest. In the case of Scotland and the UK this has involved those who work inside and outside the classroom and their professional organisations, politicians and policy makers and influential charitable bodies such as the Royal Geographical Society and the Royal Society for the Protection of Birds (both of which are committed to an educational mission as part of their work) and the Field Studies Council. This experience suggests that there might well be a bright future for experiential education in other countries, perhaps even with policy and funding support if the 'community of interests' can work together.

Furthermore there may be real benefits in collaborating for mutual skills development between schools and other experiential education providers. For example in two recent research projects in Scotland (see <http://www.education.ed.ac.uk/outdoored/research.html>) we found that (amongst other factors such as cost) many school teachers were concerned about safety issues in taking children outside the classroom and lacked the confidence or the determination to do so, whereas they were, not surprisingly, confident in their knowledge of the pedagogy and curricular context in which this could happen. The 'providers' on the other hand were a mirror image. It is clear that in such situations the building of partnerships would have considerable programme design and practical teaching benefits for both communities and would probably also lead to a stronger political consensus.

Geddes, Reddie, Hahn and Dewey: what if they were alive today?

Any student of experiential approaches to education will, through their readings and conversations with their peers, develop a relationship with the philosophers they study. I believe it would be instructive for all of us to think about our favourite philosophers and ask this question. What would be their priorities? Would anyone take any notice of them or is it a requirement that to be considered 'great' you have to be dead?

Why do there seem to be none of their stature around today? One perfectly reasonable explanation is that all the great thoughts have been thought and written down. I suspect that was a common view (about education) before Geddes, Hahn *et al* came along so I very much doubt it. Another is that we are secure in our own thinking and do not challenge the basis of our philosophy. This would be a pity, especially as this is just the kind of thing we expect our students to do. Another is that there are simply not the philosophers and activists out there to wrestle with these issues and stimulate intellectual and practical developments, to think differently, prepared to critically examine the

arguments but be open to change. But again I think not, there is much original and incisive contemporary thought and writing on education and related disciplines and we would do well to look to these fields and take note of it.

In my view if Hahn, Geddes and others were alive today they would feel compelled to address the 'big issues' of the day. In the light of the heavily structured approach to education we see in most countries I think their interest in experiential approaches to education may be even stronger than it was in their day. I am sure they would still be committed to educational aspects of personal and social issues, particularly in relation to health and social justice, international relations, religious sectarianism etc. and these would feature in their work. However I can think of no bigger issue today than global climate change, and I am convinced this would be a central focus of their work, particularly because experiential approaches (especially in the outdoors) lend themselves to this.

I should of course examine my own assumptions about global climate change etc. Space and time does not permit a lengthy discussion but I can say that throughout my career (initially as an environmental scientist) I have strived to adopt a critical stance and have made a point of examining and understanding the science of this issue; I have examined a number of reports and listened carefully to the arguments when I have heard them. The reports of the Intergovernmental Panel on Climate Change (http://www.grida.no/climate/ipcc_tar/) and very recently (30 October 2006) the Stern Report (the Executive Summary can be found at http://www.hm-treasury.gov.uk/media/8AC/F7/Executive_Summary.pdf) make convincing and alarming reading. In the case of the Stern Report much of the content is economics so I cannot apply my understanding of the science, but rather must rely on the 'expert source', Sir Nicholas Stern who is the former chief economist of the World Bank. He was commissioned by the UK Government to assess the economic consequences of inaction and action on global warming, and a year of effort from him and his team led to a 900 page report which sets out our options for the future. In essence the report asserts, as climate scientists have been arguing for some while, that climate change is real and that the consequences of inaction to tackle it now will lead to disruption and economic collapse comparable to global war. In economic terms the impact of global warming is likely to shrink the global economy by 20% but Stern suggests, action now will cost 1% of Gross Domestic Product. The report is being taken very seriously in the UK with all political parties in support of action and the Prime Minister stating that it is the most significant report he has read in the time he has been in post. In passing I feel compelled to comment that it seems ironic and unfortunate (to say the least) that the voices of a generation of scientists seem to have been so poorly heard (despite their consistent warnings) until an economist includes their work in his report.

Whilst I am convinced that Hahn, Geddes and others would consider this a high priority this is not really the issue. Like all good teachers they would be confident in the abilities of their students (ourselves) to do a better job than they would themselves. We are the generation of educators who must make the decision to address this issue in our work or not. It is not for me to say what any individual or organisation should do, but I can say that in my own practice I have given this considerable thought and emphasis. In doing so I have found a wide variety of educational opportunities which are stimulating and meaningful for students (see for example Higgins, 1996b). Again the Scottish Government is of a similar view, placing emphasis on the role of outdoor education in meeting its educational targets during the UN Decade of Education for Sustainable Development (we are already in year two) (see <http://www.scotland.gov.uk/Publications/2006/07/25143907/0>).

Even castles in the air need foundations: a practical example

As with many aspects of education Geddes was certainly ahead of his time. A century ago he made the point that '*by leaves we live*'

This is a green world, with animals comparatively few and small, and all dependent on the leaves. By leaves we live. Some people have strange ideas that they live by money. They think energy is generated by the circulation of coins. Whereas the world is mainly a vast leaf colony, growing on and forming a leafy soil, not a mere mineral mass: and we live not by the jingling of our coins, but by the fullness of our harvests.

Geddes (1919)⁹

A moment's thought on the educational potential and implications of this gives rise to consideration of photosynthesis in plants absorbing the carbon dioxide (CO₂) that we breathe out and we produce through burning fossil fuels, and their role in releasing the oxygen we need to breathe.



This equation represents one of the most fundamental processes which sustains life on Earth. Without plants converting water and carbon dioxide into glucose (for the structure of the plant) and oxygen, we would have no air to breathe, and indeed would not have evolved. The fact that many of us do not understand the fundamental importance of this process and could probably not name more than a tree or two and a couple of other plants, and yet would instantly recognise global marketing brands such as 'Nike', 'The North Face' or 'Snoopy' means that as educators we have an important and urgent job to do if we are to address global climate change.

The great educational potential of dealing with such an issue experientially in the outdoors (carbon cycle, wood cutting and fire-making, tree-planting, prose and poetry etc) is obvious. For example of such prose and a suggestion of a practical exercise for outdoor experiential educators see the chapter entitled 'Good Oak' in Aldo Leopold's *A Sand County Almanac* (1968) (originally published in 1949):

Fragrant little chips of history spewed from the saw cut, and accumulated on the snow before each kneeling sawyer. We sensed that these two piles of sawdust were something more than wood; that they were the integrated transect of the century; that our saw was biting its way, stroke by stroke, decade by decade into the chronology of a lifetime, written in concentric annual rings of good oak.

Experiential educators can make a significant contribution to understanding the carbon cycle and our dependence on it, particularly through the outdoors by helping their students to develop a connection to place and to understand the consequences of their actions, but there is *knowledge* and *content* too, and we must not imagine we can engender real understanding through the 'affective knowing' alone.

⁹ From 1888 to 1919 Geddes was Professor of Botany at the University of Dundee (Scotland). He was only required to lecture during the summer term of each year and he spent the rest of the time travelling and working all over the world. This passage is from his final lecture in 1919. It was published in a reprint of *Cities in Evolution* in 1949 (p. 216).

In summary

'The way is the goal ...'

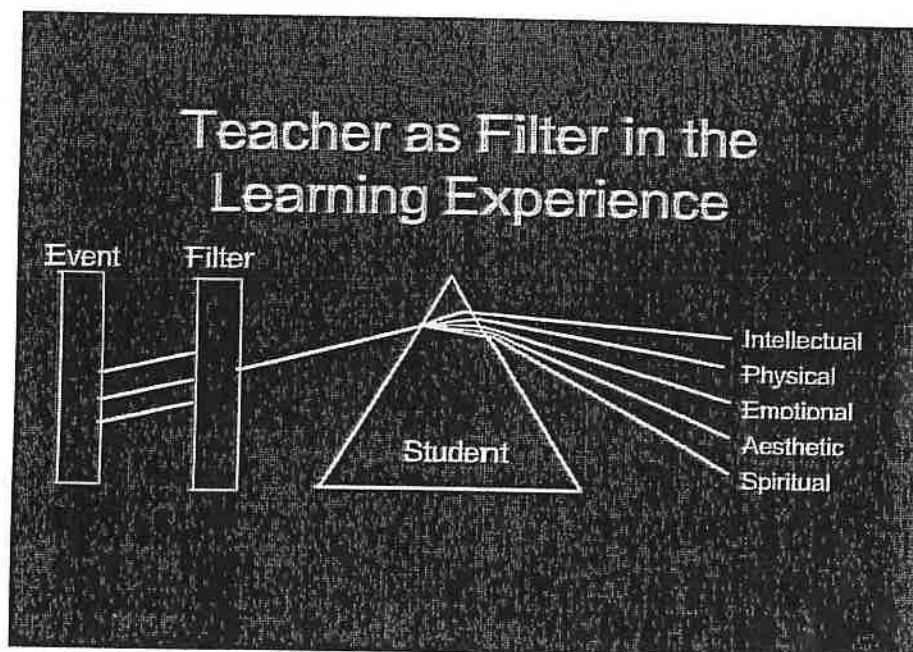
Gandhi

There are many facets of experiential education theory and practice that sit comfortably alongside modern progressive educational policy and provide realistic opportunities for educational development. For a field that started out as a radical educational experiment to make its contribution to addressing the urgent educational, social and environmental priorities of the day it needs to do so with integrity. To gain respectability the movement must not fall into the trap of providing simplistic recreational activities that to any outside observer would just appear to be fun without substance or depth.

I have put forward a number of models here which are tempting to adopt as recipes for delivering educational programmes. I should stress that as Geddes called them these are mere '*thinking machines*' (see Meller (1990) and Stephen (2004) for further information) designed to prompt creative acts, and not the 'black boxes' seen in many books. The goal of the teacher must be to sensitively respond to the learning needs of their students. This is the most complex task and the most demanding of skills, and worthy of a lifetime apprenticeship.

There is knowledge and understanding to be gained and this takes effort on behalf of the students and perhaps less obviously the teacher/facilitator. In my view and in my experience, practitioners and policy makers as well as those who research and other educational fields (eg mainstream education, psychology, sociology etc) will only take us seriously if we do so and we can be seen to be engaging with significant issues.

Therefore I need in my own work at least to review my priorities and make choices. To do so I have come up with my own version of the 'three Rs' Patrick Geddes rejected. My work has to be *Real and relevant* (to students, colleagues and politicians), help develop *Relationships* and a willingness to take *Responsibilities*. This leads me to consider myself in the optical analogy earlier as a filter between the experience and the learning of my students. As the filter I select the experience for my students.



My own priorities lead me ensure that a central focus of these *Real and relevant* issues are the global environmental issues we face today and my approach to doing so is to encourage students to develop their relationships with place, people and planet, and to help them have the confidence and drive to take responsibilities for their actions. In my view this is the way true leadership over this issue (and indeed many others) may ultimately come to make a difference. In contrast, if I leave such issues out of my teaching I stand the very real risk that my students will assume that they are not important. They become, as Eisner (1985) suggests part of a *null* (ie not valued) curriculum that students are just as aware of as the 'explicit' curriculum we do teach.

I cannot ask you to make these your own priorities, but I can suggest you consider the 'three Rs' above (*Real/relevant, Relationships, Responsibilities*) in your own practice and perhaps even add a forth 'R' – a willingness to take *Risks* in your teaching. Undoubtedly since the development of the concept of 'experiential education' we have been on an educational adventure. As with all true adventures the outcome is uncertain but in my view we improve our chances of succeeding if we focus on the destination (the big issues of the day) and honestly and openly reflect on our progress so far. In doing so we can continue our exciting educational experiment and also make our contribution to modern society. If Hahn (and Geddes) were alive today I believe they would be delighted to see a reflective, critically aware, ambitious experiential education movement determined to make a difference and to contribute to understanding and solving the major issues of the day; which in the case of global warming may turn out to be the biggest and most urgent issue we as a species have ever faced. I believe that we have the skills and knowledge to make a contribution to the most important of facets of human development necessary to do so; namely education. I can imagine no greater privilege.

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I wish to note the particular contribution of my willing parents to allow my school-teacher (Brian Gibson) to give me opportunities to appreciate the learning potential of the outdoors. Now in his mid-80s (and still periodically skipping yachts!) he at one stage in the 1950s worked on one of Kurt Hahn's projects, the Moray Sea School in Scotland. Brian's efforts and inspiration set me on the path that became for me 'the best job in the (real) world'. I am also grateful for the willingness of my family to allow me to continue to do it and the time to attend the meeting.

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