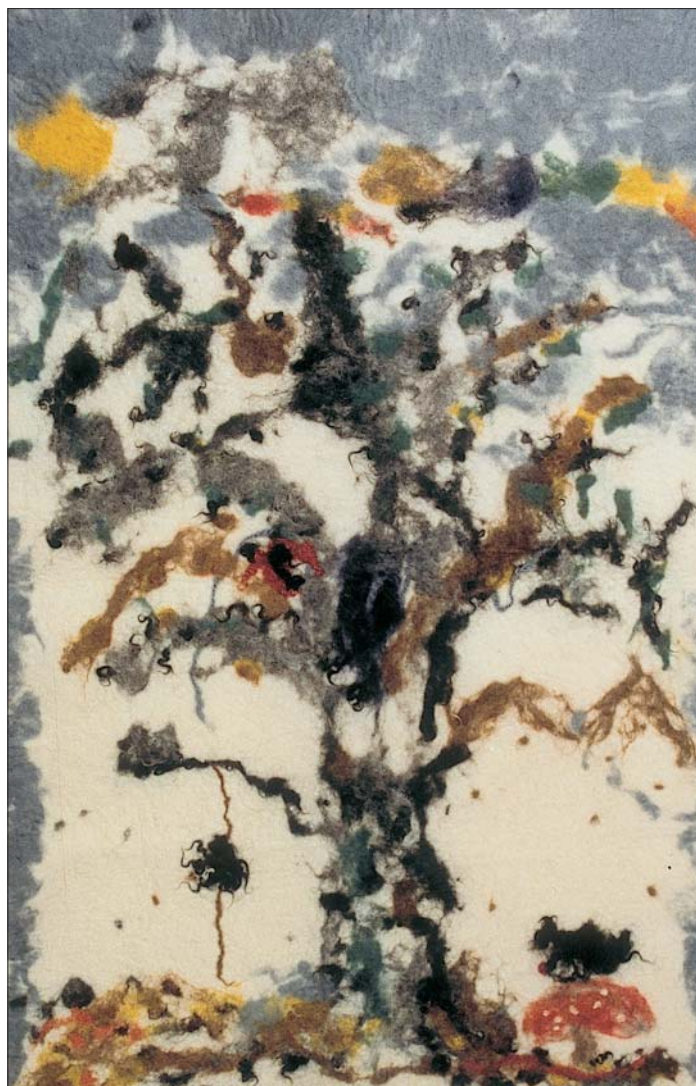


# OUTDOOR EDUCATION

AUTHENTIC LEARNING IN THE CONTEXT OF  
LANDSCAPES



VOLUME 2

AN INTERNATIONAL COLLABORATION PROJECT  
SUPPORTED BY THE EUROPEAN UNION

COMENIUS ACTION 2.1 EUROPEAN IN-SERVICE TRAINING COURSES

# **OUTDOOR EDUCATION: AUTHENTIC LEARNING IN THE CONTEXT OF LANDSCAPES**

**Volume 2**

**An international collaboration project  
Supported by the European Union  
Comenius Action 2.1 European In-Service Training Courses**

This booklet on outdoor education is the second published as a result of an international project involving educational institutes in five European countries (Austria, Czech Republic, Germany, Sweden and the United Kingdom). The project ran from October 1999 to September 2002 and was supported by the European Union through Comenius Action 2.1.

One of the objectives was to review national and European perspectives on Outdoor Education and in doing so raise awareness of these perspectives and develop a deeper understanding in a European context. The project has resulted in collaboration between universities, colleges, schools and national associations. One key objective was to prepare for and run an in-service course for teachers and school staff, through which participants could extend their perspectives on Outdoor Education in Europe. This booklet contains details of the theory underpinning these courses and an overall evaluation of the project.

This booklet is designed to complement the earlier one volume which provided some basic theory and a description of Outdoor Education in several national settings.

KINDA EDUCATION CENTRE  
[www.ode.kindase.se](http://www.ode.kindase.se)



## **Socrates**

This project and publication has been part-financed by the European Union

ISBN 91-631-2904-3

**OUTDOOR EDUCATION**  
**AUTHENTIC LEARNING IN THE CONTEXT OF LANDSCAPES**

**Volume 2**

**An international collaboration project**  
**Supported by the European Union**  
**Comenius Action 2.1 European In-Service Training Courses**

The book should be cited as:

Higgins, P and Nicol, R (2002) Outdoor Education: Authentic Learning in the context of Landscapes (Volume 2)

Kisa, Sweden 2002

ISBN number 91-631-2904-3

Cover picture: The Tree of Knowledge, felt-work made of wool by the project group.

# CONTENTS

## Preface

### PART 1 THEORY AND PRINCIPLES OF OUTDOOR EDUCATION

<b>Introduction – What is Outdoor Education?</b>	1-2
Prepared by all project partners	
<b>Outdoor Learning in Theory and Practice</b>	3-14
Peter Higgins and Robbie Nicol	
<b>A ‘Construed’ Link between Outdoor Education and Constructivist Pedagogy</b>	15-17
Clemens Seyfried	
<b>Environmental Education: an overview of the area from a Swedish/Nordic perspective</b>	18-24
Anders Szczepanski	
<b>The Landscape of the School Ground</b>	25-28
Sue Fenoughty	
<b>A Framework for Evaluation of Outdoor Education Programmes</b>	29-36
Robbie Nicol and Peter Higgins	

### PART 2 THE COMENIUS PROJECT: AIMS, PROGRAMMES AND EVALUATION

<b>Outdoor Education – authentic learning in the context of landscapes: project philosophy, aims and group processes</b>	38-48
Prepared by all project partners	
<b>The Courses</b>	
1. In service training course in Sweden May 2001	49-52
2. Sweden Programme	53-55
3. In service training course in Scotland May 2001	55
4. Scotland Programme	56
5. In service training course in Germany May 2001	57-60
6. Germany Programme	61-64
<b>How Teachers in Europe Think about Outdoor Education</b>	65-76
Clemens Seyfried and Marianne Neißl	

### PART 3 APPENDICES

Project Partners	78-80
Presentations at DG Environment, Brussels	81-83
Bibliography	84-89
Useful Websites	90
Contents of Volume 1	91-92

## PREFACE

This booklet on **Outdoor Education – Authentic Learning in the Context of Landscapes Volume 2** is the second published as a result of an international project by educational institutions in five European countries – Austria, Czech Republic, Germany, Sweden and United Kingdom. The project work took place from October 1999 to September 2002 and was part-funded by the European Union through Comenius Action 2.1.

One of the objectives of the project was to take a European perspective on outdoor education and in doing so to encourage greater understanding of national and European perspectives amongst teachers and students. As part of the project we have developed an in-service course for teachers and school staff in Europe, through which participants should gain an understanding of these perspectives. This booklet is intended to act as a source of information for anyone organising or attending future in-service courses, or indeed any other aspect of outdoor education provision.

The book is organised in three parts. Part 1 contains articles on the theory of outdoor education and advice on the evaluation of programmes. Part 2 is an evaluation of our Comenius outdoor education project, written by members of the project group. Also included are details of the in-service programmes planned and run by project partners. Part 3 contains the Appendices.

We are grateful to the European Union for financial support. All those involved in this project have enjoyed the process and the outcomes of this collaboration - we have learnt a great deal. We hope that our work will have been of value to course participants and that the material recorded in this (and the earlier booklet on a similar theme) will be a valuable resource.

**PART 1**

**THEORY AND PRINCIPLES OF  
OUTDOOR EDUCATION**

## Introduction

### What is outdoor education?

*Prepared by all Project Partners<sup>1</sup>*

Outdoor education is a cultural construct which it is thought about and applied in different ways within and between countries. For example, the European Institute for Outdoor Adventure Education and Experiential Learning identifies outdoor education as comprising "outdoor activities", "environmental education" and "personal and social development".

The relationship between the three dimensions can be seen in the following model:

#### THE RANGE & SCOPE OF OUTDOOR EDUCATION



Higgins and Loynes (1997)

Further understandings can be developed through thinking about concepts such as:

- learning out of doors
- outdoor learning
- education out of doors
- education in nature
- authentic learning in landscapes
- the outdoors: a learning environment.

---

<sup>1</sup> Dusan Bartunek, Britte Brügge, Sue Fenoughty, Dave Fowler, Margrit Hensler, Peter Higgins, Heike Laschinski, Iris Löhrmann, Marianne Neißl, Jan Neuman, Robbie Nicol, Clemens Seyfried, Anders Szczepanski

These ways of thinking about outdoor education begin to reflect great diversity. Some of these differences are explained when looking at the setting in which outdoor education takes place. For example, teachers in an inner city school may want to make use of their school grounds, or nearby park or woodland, to pursue learning outcomes. Equally, teachers may have access to rural areas and pursue learning outcomes in wilder nature. If a teacher is trained in adventurous activities then she may want to pursue learning outcomes through these means in either urban or rural settings.

Behind the diversity of approaches lie different theoretical understandings and practical applications of outdoor education. They will include ideas about the cultural and natural heritage, ideas about 'a sense of place', and how to use the opportunities available to each teacher's particular situation.

What is common to these ideas is that the teacher and pupils pursue learning outcomes beyond the classroom. This is not to suggest that outdoor education is a better form of learning than class-based learning. It is to suggest that some learning is better suited out-of-doors and that there are good educational reasons for identifying and capitalising on these opportunities. In this way class-based learning can be integrated with outdoor learning.

This is very much in the tradition of integrated holistic education as it was suggested by Comenius himself. It was the type of approach whose historical roots lie in the work of, for example, Johann Pestalozzi, John Dewey, Paolo Freire and Patrick Geddes. From these philosophical underpinnings outdoor education seeks to explore the practice of outdoor education in relation to people, place and activity in keeping with the model above.

## **A place and means**

The concept of outdoor education acknowledges the importance of selecting an appropriate place for education as well as a technique or means of learning. In this setting students learn directly about the relationship of knowledge to the physical reality of that place. This is achieved through environmental, social, and cultural dimensions whereby that which is known has a past, present and future. Through these means students learn about the key importance of relationships and respect for the learning and teaching process.

The relationship between the teacher and learner is characterised by an open minded exchange of views between the two. This is a constructivist pedagogy whereby the learners construct their own view of the world based on personal experience. A second dimension, reconstruction, recognises that the learner may wish to modify their personal experiences with reference to existing theoretical constructs. Lastly, throughout the process of reflection, it is sometimes necessary to deconstruct personal and social constructs in order to gain new understandings. This process begins with personal experience and leads to deep questioning.

# Outdoor Learning in Theory and Practice

*Peter Higgins and Robbie Nicol*

*School of Education*

*University of Edinburgh*

## Abstract

This chapter offers some guidance on educational theory and background relevant to learning in general and outdoor education in particular. It provides some research evidence and relevant theory, particularly focusing on the themes of learning through experience, and personal and social development. The key points are:

- There is a strong educational justification for an experiential approach to learning.
- It is important to cater for intellectual learning which has a number of facets (multiple intelligences) and physical, emotional, aesthetic and spiritual development.
- Adventure experiences should encourage a ‘mastery’ approach rather than a ‘performance’ approach;
- Outdoor adventure provides one important way in which personal and social learning outcomes may be achieved but caution should be exercised over the claims.
- A number of studies provide evidence of modest positive outcomes from programmes which involve experiential learning and new or adventurous activities. Most indicate the key role of choice of appropriate activities and goals, high quality facilitation and programme duration.
- Research evidence suggests that the optimum minimum time for residentials is four days though longer is generally better.
- In the design of programmes it is always important to consider aims, assumptions, methods, content, evaluation and claims.
- Reflective professional practice is central to this process. To this end we should repeatedly ask ourselves the questions:
  - ‘why am I doing this activity with these individuals at this time?’
  - ‘what does theory and experience tell me about the choice of activity and what young people are learning?’
  - ‘how do I know if I have been successful in achieving my stated aims?’

## Introduction

This chapter is intended to provide some guidance on educational theory and background information. Whilst there has been a great deal of effort put into educational research over the years, very little of this relates to the role of 'adventure' in learning. By this we do not mean specifically 'outdoor adventure' or 'outdoor education', though this is a discipline which particularly lends itself to such an approach. In this chapter we have drawn together the results of our own research and that of our colleagues and other authors from all over the world.

It cannot be a definitive text but we hope it provides a basis for reflection. If we were to summarise the issue in a couple of sentences it would be that the reflective professional practitioner will repeatedly ask him or herself the questions:

- 'why am I doing this activity with **these individuals** at this time?'
- 'what does **theory and experience** tell me about the choice of activity and what young people are learning?'
- 'how do I know if I have been successful in achieving my stated aims?'

The period the young people are involved in an outdoor programme is often brief and so the key aspiration of providers should be to deliver the most effective programme possible within this period of time. With this booklet we hope to offer at least some ways of thinking which may assist in this process.

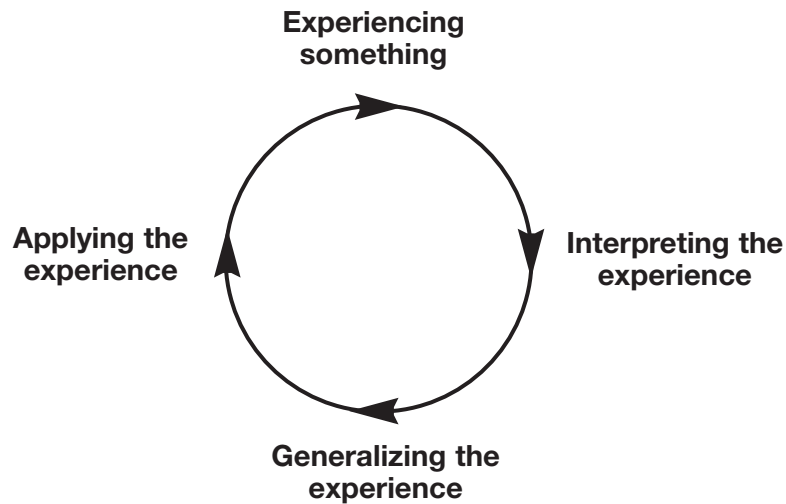
## Experiential Learning

Experiential learning is generally concerned with learning that depends on first-hand experiences which connect the learner with real people and real issues. It is often associated with informal education although this is not exclusively so. Furthermore, it is generally considered to be a lifelong process integrating education, work and leisure.

Experiential learning is based on the premise that the learner learns best by doing and one of the teaching methods often employed is based on problem solving approaches. In this way experience becomes the catalyst for learning in other key government policy objectives such as citizenship and personal and social education. This means that experiential learning has direct relevance to the in helping the transition from secondary school to adult life and enhancing a range of 'personal and social skills' among young people.

It can be helpful to refer to models when thinking of these issues and two of the most frequently used are outlined on next page.

## Kolb Cycle of Experiential Learning



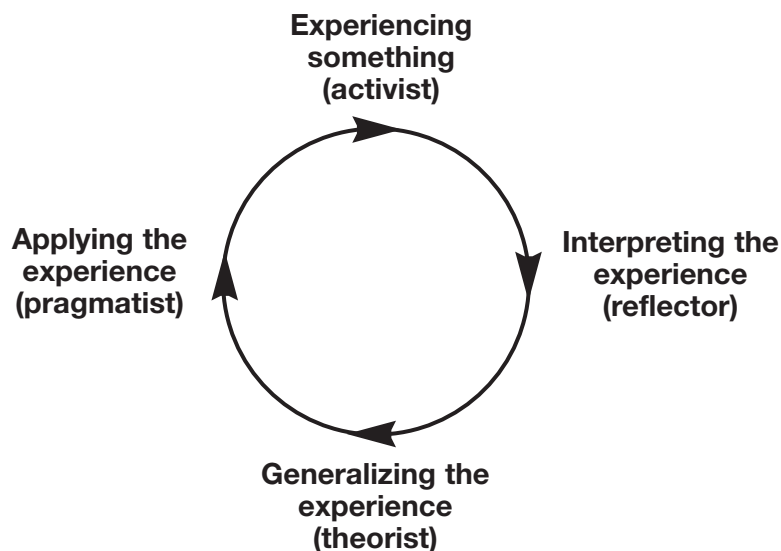
Kolb's cycle can be used to explain experiential ways of learning. The model does not really do justice to the complexity of the brain and its ability to process complicated information. It also implies that experience and reflection occur independent of each other, which is challengeable. It does however, provide a framework for thinking about the linkages between different components of learning processes. Consequently, it offers a tool to think about how we work with young people.

Take the initial experience component of the model. The suggestion here is that it is not sufficient for young people to take part in outdoor activities and for the teacher to assume that the experience will automatically translate into a learning outcome. The model implies that the experience does not speak for itself and that learning will not automatically occur as a result of participating in activities. Consequently young people are likely to need help with interpreting the experience. This is the role of the instructor/teacher and can be effectively achieved through reviewing the outdoor activity in relation to the educational outcome in mind. The young person is also likely to need help in generalising the experience which involves making sense of the experience in relation to the learner's own social world (which is often not related to that where the experience has taken place). Having internalised this experience the model suggests that the learning cycle is not complete until the new learning has been applied. This means that the learner can apply their new thinking in a way that allows more informed decision making than had they not had the new experience.

Using this model helps to distinguish between the quality of experience because not all experiences are genuinely educative. Take for example the case of a person stealing cars for the purpose of joyriding.

It is quite possible that the joyrider experiences 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 something mis-educative (Dewey, 1963). There is a clear role for the instructor/teacher here where the purpose is to provide a structure to help young people learn from their experiences in a way that learning is not left to chance. In this manner we can distinguish between experiential training which is suited to the idea of skill acquisition inherent in activities, and experiential learning where activities are used in an instrumental manner to promote personal and social qualities. In summary, we cannot provide a range of activities for young people and expect qualities related to personal and social education to infuse young people simply through the experience of participation.

### **Learning Styles (Honey and Mumford)**



This model can be used to show that people vary in their preferred style of learning (Honey and Mumford, 1992). It implies that people generally show tendencies towards one particular learning style, that of either the activist, reflector, theorist or pragmatist. It is based on Kolb's learning cycle and so the 'activist' is associated with 'experiencing something', the 'reflector' with 'interpreting the experience' and so on. Consequently the teacher needs to be aware that desired outcomes may depend on different methods for different people. This is where the models can be useful.

They help the teacher/instructor to become involved in each young persons' learning cycle allowing them to be alerted at an early stage as to whether their teaching is being effective. This is an extremely important point because it is important to distinguish between teaching strategies (that which the teacher wants the young person to learn) and learning outcomes (that which the young person actually learns). Furthermore it

is obvious that each of us (and each student) is capable of learning in a variety of different ways and that to maximise the learning we take from each situation we should try to engage with the experience in all four of these ways (as an activist, reflector, theorist and pragmatist).

Both of these 'models' are based on a circular concept. Whilst this is useful it does not really suggest a progressive dimension to learning. So a number of individuals and agencies have re-interpreted the Kolb Model as a spiral, with the emphasis changing from 'experiencing something' to experimentation in new situations and therefore 'experiencing something new or different'; though clearly this should relate to the particular 'skill' being learnt at that time.

It should also be remembered that experiential learning can have a debilitating effect. Just as we can distinguish between educative and mis-educative experience it is also possible to say that some experiences inhibit personal growth. One need only reflect on the idea of mis-adventure (Mortlock, 1984) to recognise that when an instructor/teacher fails to select appropriate activities, and the level at which they are to be pursued, then the activity can lower feelings of self-esteem as opposed to raising it. This too is a vital aspect of good practice as an activity which is suitable for some members of the group may turn out to be a negative experience for others. What it boils down to is the need to constantly ask oneself 'why am I doing this activity with these individuals at this time?'

## **Multiple Intelligences**

Closely related recent work by Howard Gardner (1993) has led to the suggestion that the simplistic notion of a single 'intelligence' is outdated. He argues that for each of these there are at least seven facets to intelligence, and that we have developed all of these to a lesser or greater extent. He lists:

- musical intelligence;
- bodily-kinaesthetic intelligence;
- logical-mathematical intelligence;
- linguistic intelligence;
- spatial intelligence;
- interpersonal intelligence;
- intrapersonal intelligence.

He and others are critical of the traditional education system because it favours logical-mathematical intelligence, arguing that this limits the potential for those who are better suited to learning in other ways. Others have gone further, suggesting that this leads to dissatisfied learners who are troublesome at school and have poor education prospects.

Such an approach to learning has clear benefits as it provides a way of thinking about the intellectual development of the whole person. This theme is explored further below where we suggest that we extend our thoughts on such development to include intellectual, physical, emotional, aesthetic and spiritual dimensions.

Such an approach to learning has clear benefits as it provides a way of thinking about the intellectual development of the whole person. This theme is explored further below where we suggest that we extend our thoughts on such development to include intellectual, physical, emotional, aesthetic and spiritual dimensions.

### **What is ‘Good Practice’ in Helping Others to Learn?**

According to the Scottish Consultative Council on the Curriculum (1996): ‘Learning is messy. We rarely learn anything by proceeding along a single path to pre-determined outcomes’. It seems that we understand the world by relating pieces of information to others and fitting it all together. As multi-sensory animals we understand the world through sight, sound, taste, smell and touch. We also relate to events in ways which are intellectual, physical, emotional, aesthetic and spiritual. Whilst it may be possible to experience an event through a single sense and know it in a single way (eg reading text and considering it intellectually), this is not the norm. The more complex the experience, the more ways there are of experiencing it and knowing it.

In light of this it seems that the more ways an event is known, the better the chance that it will be understood. So it makes sense for those involved in ‘helping others to learn’ to provide experiences that allow the learner to use all his or her senses in experiencing and ‘internalising’ these experiences.

### **Effort versus Performance**

There is evidence to suggest that there are educational benefits in setting students challenges which require significant effort on the part of the learner rather than them simply being able to do something or not. Many teachers make a point of rewarding the efforts made by students who try hard to achieve. This can be problematic in the case of some young people in contemporary school education where achievement is primarily measured through exam success. Adopting this theme Rubens (1997) 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 current literature on motivation in learning suggests the value of a ‘mastery’ approach to learning and contrasts ‘narrow’ and ‘broad’ views of adventure. ‘Narrow adventure’ experiences are in essence activities which are short in duration and focus on high thrills, but require little effort on the part of the student who takes minimal responsibility for his or her actions. In outdoor adventure activities zipwires, ropes courses and abseiling may be cited as examples. 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 acti-

vities are characterised by, for example, journeys by canoe or on foot. Rubens (1999) makes a strong case that ‘broad adventure’ encourages a mastery approach to education which leads to a willingness in students to take responsibility for their actions in later life. ‘Narrow adventure’ appears to have no such benefits.

**Dimensions Associated with Narrow and Broad Conceptions of Adventure**

<b>Narrow View of Adventure</b>	<b>Broad View of Adventure</b>
Short timescale of experience	Long timescale of nature
High thrill challenges	Many challenges varied in nature
Little or no effort involved	Some or much effort involved
No responsibilities developed to students	Responsibilities devolved to students

However, a great deal of anecdotal evidence together with our own survey results (Nicol, 2001) suggests that the trend in outdoor education is towards the provision of short duration, high excitement experiences of the type noted above. Furthermore, such activities rarely involve real risk, but often emphasise apparent risk. It seems disingenuous to develop a range of such activities which appear to be risky, and argue that they have some unspecified educational benefits, when they are at least giving participants a false impression of hazard and risk. This is crucial in determining if any new found self-awareness can contribute to the growth of society. What the hierarchy helps to show is that by making explicit the assumptions which underpin our aims there is some reason to remain circumspect. In other words it is important to bear in mind what claims can legitimately be made of a short (eg five-day) programme.

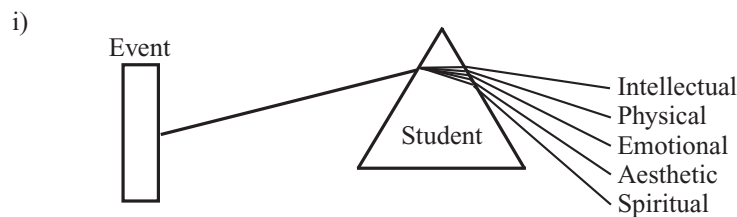
**Facilitating Learning through Direct Experience**

As noted earlier a good learning experience may involve a wide variety of learning opportunities. At times one form of development may find more emphasis than at others, but there is often the potential for intellectual, physical, emotional, aesthetic and spiritual development to take place. The mix will vary from individual to individual and from time to time.

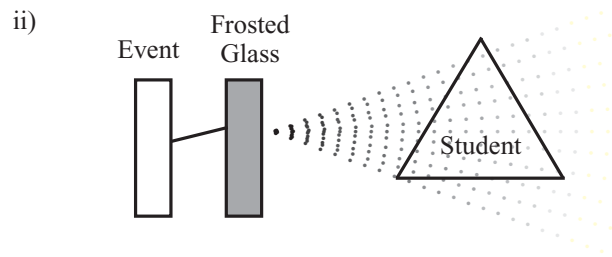
The teacher or instructor can take a number of roles in this process. Several of these are represented diagrammatically here. The student is represented as a prism and the experience as a beam of light. The role of the teacher or instructor can be considered as quality of the filter which comes between the event and the student.

### Education through direct experience: The Role of the Teacher

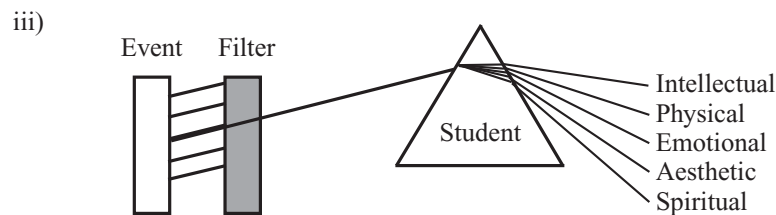
i) No role for the teacher / instructor. The student experiences the event without any intermediary. Some form of development will take place dependent upon the student's interest in learning. It is up to the student to interpret the situation or not to bother.



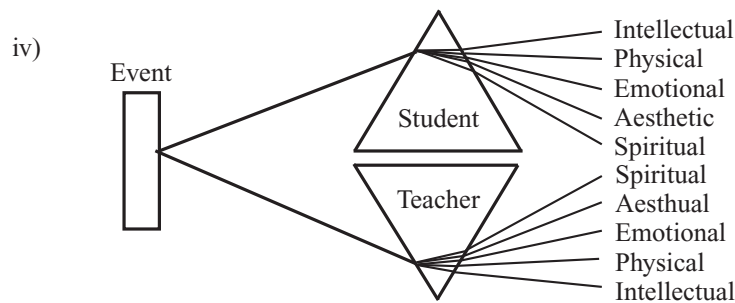
ii) The teacher/instructor as 'frosted glass'. The light from the beam becomes diffused by the influence of the teacher who selects and separates out the information he wishes to pass on to the student. There is no direct experience and there is a likelihood that the true nature of the experience will be so reduced by the teacher adopting this role that its value is substantially reduced for the student.



iii) The teacher / instructor as 'filter'. If the initial event is complex it is possible that the teacher / instructor may be acting in a positive fashion by selecting the particular direct experience the student needs and then focusing this for the attention of the student.



iv) Teacher / instructor and student share a common experience. In this case both teacher/instructor and student are represented as prisms. The experience each gains from the event is separate but there is room for comparison and subsequent greater understanding of both the event and one another.



Teacher / instructor and student will have had different previous experiences. It is likely that the teacher / instructor will have a greater range of experiences to draw upon and these are set alongside the new ones. The result is a sharing of experience and subsequent development. This will probably be greater for the student as she / he will initially be less experienced. However, as the student gains more shared and independent experience there will be less need for the teacher / instructor to be involved or to interpret the experience. It is worth noting that the teacher / instructor also learns from this process.

## Outdoor Adventure Education and Experiential Learning

Outdoor Adventure Education has a particularly close relationship with Experiential Learning. 'Outdoor Adventure Education' is seen as drawing on three main areas of outdoor activities, environmental education and social and personal development. A good outdoor educator may well be focusing attention on one or other of these at any given time but will still be sensitive to opportunities to guide experience within the complementary areas. However, all experience must take place within a framework of safety. Appropriate decision making and the discrete maintenance of a safe environment within which outdoor experiences take place are a hallmark of professionalism.



It is worth exploring the rationale behind their use as a particular case of experiential learning. Whilst there are many ways in which such activities are used there is broad agreement that the process comprises most or all of the following elements.

- The educational intention is to stimulate personal and social development. Those who work in this field have learning aspirations for their students beyond physical recreation to the academic, aesthetic, spiritual, social and environmental.
- The themes of Outdoor, Adventure and Education are all important to some degree in the process, which should not simply be recreational, nor should it take place without at least some experience of the outdoors. Adventure in this context implies that there is a 'journeying out' (a move onto new ground) to embrace the experience.
- The process engaged in is that of learning 'experientially'. To maximise the effect, the experience should be direct rather than mediated, with the facilitator acting as a guide rather than in the usual formal capacity of a teacher.
- The result of this approach being applied in the powerful context of the outdoors is that many report the experience to be effective as a means of personal and social development, and in increasing awareness of community and environment.
- Whilst some aspects of the experience may involve the use of settings in which there are apparent or real hazards, the physical and emotional safety of the client is protected through appropriate professional standards.
- The natural environment is usually 'the workplace' and professional standards must be applied to ensure its protection from overuse. Outdoor Education programmes should also encourage participants to develop respect for the environment.
- As a result of this experiential process, participants should take increased responsibility for their own learning, and consequently develop increased confidence in their own judgement and ability to direct their lives.

## **Residential Education as a Facet of Experiential Learning**

Bringing together young people under one roof for several days provides an environment where people can explore ideas relating to individual and group identity. This includes that which they bring with them and the identity they are forming in this new setting. It is this newness that provides an ideal setting for the exploration of attitudes and behaviour which make up group identity. It provides a window for young people to view their everyday life from a different vantage-point. In this manner the residential provides the creative instructor/teacher with an abundance of opportunities to help young people think about themselves in relation to their past, present and future. It is from this understanding of circumstances that young people come to know that they are not simply shaped by the past and present but they can actively learn from these experiences and shape their own futures.

## **Length of Programme**

Research shows that the quality of the experience is directly proportional to the length of involvement. For example is Sail Training (McCulloch, 2002) a period of about four days is widely recognized as being critical. Less than that does not allow relationships between staff and trainees to be established and a shared understanding of the situation to develop. More time than the four days is good but the changes in the social environment and relationships beyond four days are more subtle and probably less significant. It's like a very steep gradient to begin with which flattens out to a very shallow rise after four days. This effect is fairly consistent but can be modified by, particularly, prior involvement by participants in other activities with a similar ethos or character.

Other research shows that programmes of even greater length were effective (Hattie, et al, 1997). In general the findings indicate that the longer the programme the better. However, it would also appear that beyond the initial four days the defining factor in the effectiveness of programmes is not so much the length of programme but the quality of the relationship between the learner and teacher.

## **Concluding Comments**

A number of studies noted earlier provide evidence of positive outcomes from programmes which involve experiential learning and new or adventurous activities. Most indicate the key role of choice of appropriate activities and goals, high quality facilitation, programme duration etc. Such studies also report modest gains in personal and social skills.

In this text we have presented a number of models which we hope will help clarify some relevant aspects of theory and practice in experiential learning. They are of course just are just models and reality is much more complex. They are offered as 'thinking machines' - ways of looking at learning which we find helpful ourselves.

Finally we should stress that it is not our intention to suggest that practitioners are 'doing it wrong' or even 'doing it right'! However, our work in this field has convinced us of the benefits of reviewing practice in the light of emerging evidence and theory. This should not be seen as an inconvenience, but a range of important new possibilities for our work.

## References

- Dewey, J. (1963) *Experience and Education*. London: Collier-Macmillan.
- Gardner, H. (1993) *Multiple Intelligences: The Theory in Practice*. New York: Basic Books.
- Hattie, J., Marsh, H., Neill, J. and Richards, G. (1997) Adventure Education and Outward Bound: Out-of-Class Experiences That Make a Lasting Difference. In: *Review of Educational Research*, 67 (10 pp. 42-87).
- Honey, P. and Mumford, A. (1992) *Manual of Learning Styles*. Maidenhead: Honey Publications.
- McCulloch, K. (2002) *Four Days Before the Mast: A Study of Sail Training in the UK*. PhD Thesis, Edinburgh University.
- Mortlock, C. (1984) *The Adventure Alternative*. Cumbria: Cicerone Press.
- Nicol, R. (2001) *Outdoor Education for Sustainable Living?: An investigation into the potential of Scottish local authority residential outdoor education centres to deliver programmes relating to sustainable living*. PhD Thesis: University of Edinburgh.
- Rubens, D. (1997) *Outdoor Education, Adventure and Learning – A Fusion*. MSc Thesis: University of Edinburgh.
- Rubens, D. (1999) *Effort or Performance: Keys to Motivated Learners in the Outdoors*. In: *Horizons*, 4 pp 26-28.
- Scottish Consultative Council on the Curriculum. SCCC, 1996: 9.

# A 'Construed' Link between Outdoor Education and Constructivist Pedagogy

*Clemens Seyfried*

*Pädagogische Akademie d. D. Linz*

When considering new concepts for the classroom in an ever-changing world two in particular stand out: 'outdoor education' and 'constructivist pedagogy'. Both concepts represent a move away from traditional ideas of education and are oriented towards what used to be referred to as the 'learner' or 'recipient'. This paper attempts to demonstrate a link between the two concepts by means of concrete approaches. The link between the two concepts is often mentioned by advocates of outdoor education when they state that an important fact in learning is that which the learner already knows in one form or another. Additionally, they state that 'according to the constructivist view, the individual himself construes and adds to this knowledge by frequent visits to the real world' (Dahlgren and Szczepanski, 1998: 20)

A constructivist approach to pedagogy represents a departure from the idea that knowledge in the form of objective truths, may be transported from one person to another. This concept, that by precise observation of the world around us, objective truths may be independently observed, has greatly influenced the basic concepts which underly our schools and educational institutions. 'The important metaphysical assumption of objectivism is that the world is real, it is structured, and that structure can be modelled for the learner. The meaning that is produced by these thought processes is external to the understander, and it is determined by the structure of the real world.' (Jonassen, 1991: 28).

Constructivist pedagogy is based on the principle of exchange of views, differing constructions and the recognition of these. Through this process a new form of teaching is developed. This means that the question of finding the best possible means of transporting knowledge, and the best possible techniques of transferring ostensibly objective knowledge into the learners' heads, is no longer of primary importance. This problem of 'knowledge transfer' has been a recurring one over the years. No sooner had one particular method of knowledge transfer become fashionable, than another arrived on the scene. However, many of these approaches were based on the same underlying principles, namely that small 'parcels' of information should be transferred from teacher to student. These 'parcels' of information were interpreted as perceptions of a 'real world' and, as such, were completely independent of the learner. The transportation of such knowledge was to be as imaginative, varied and interesting as possible, with the additional aim that the student should disturb the lesson as little as possible.

Seen from a constructivist point of view, there are (as we have seen above) no objective realities. This means that even when the world seems to be presenting us with an objective reality (for example a tree, a child, somebody running ...) this is nevertheless

seen differently by each observer. In school reductions and abstractions of these subjective truths are presented as binding and undiffering realities.

The pupil is thus faced with several problems simultaneously:

- He is expected to abandon his own created reality in favour of the reality of a different (often anonymous) person.
- That which is presented as reality often bears no relation to the cognitive or emotional world of the pupil.
- Moreover, the postulated binding reality is presented in many learning situations as either an abstraction or a reduction.
- Should a pupil have differing views, it is difficult for them to present these in a such a way as to avoid negatively influencing the teacher.

It is, I think clear that any school will have problems with this form of teaching. In discussion with pupils, students, parents and teachers, and also from my readings of the relevant literature, I have become aware of a dominant tendency, namely that those involved are not happy with the situation. Schools find themselves within a 'field of tension', where mistrust is a common feature of interpersonal contacts. The French philosopher Lyotard refers to this as a 'neo-romantic version of interpersonal contact: the suffering of 'what-I-am' seen from the point of view of 'what-I-should-be'. Since pupils do not often think about being 'as they ought to be', and the teacher has the obligation to make them so (i.e. motivate them), it is inevitable that mutual mistrust should arise.' (Köpke, 1995: 41). If the school reacts to this situation merely by increasing its methodological efforts, then it runs the risk of losing its spontaneity.

A new concept of constructivist, pedagogical thought, seen from three different perspectives (Reich 1996: 118) may be taken as a basis for constructivist teaching:

- **Construction** We invent our own reality. In communicating, we exchange our different ways of seeing things. Each way of seeing things is a construction. Our main aim is not, however, to convince others of the validity of our way of seeing things. What matters is each person's own reality, which they themselves construct.
- **Reconstruction** We discover our own reality. 'Reconstruction' means constructing our reality with reference to already formed constructions. Our already formed constructions are 're-discovered'.
- **Deconstruction** We destroy our reality. 'Deconstruction' means questioning our constructions and forming new constructions.

There appears to be an ever-widening gap between the interests and knowledge perceived as interesting by the pupil on the one hand, and the 'knowledge' offered by the school on the other. The logical consequence, namely to ask the pupils about their needs and wishes, their constructions, is only possible in schools to a limited extent. One obvious conclusion, is to find places where pupils can experience things directly and make concrete associations. A direct and well thought out analysis of nature and our environment enables us to make individual constructions and deconstructions

about things which are created as subjective reality. The individual may ascribe their own interpretative or descriptive values to these constructions and experience them as relevant in connection with their own reality.

Seen from this perspective, outdoor education is neither a new method nor a new concept, but rather, according to my interpretation, to my construction, an answer to the changing paradigms in education.

An old European tale seems to describe the relevance of, and links between Outdoor Education and Constructivist Pedagogy very clearly. Two aspects stand out in the following story:

- a) The necessity of going out into the open air, and secondly,
- b) the point that what is meaningful in our world is to be found within ourselves.

An old man in Cracow dreams that there is a treasure find under the river in Prague. He travels to Prague and stands at the river staring into it from a bridge, day after day. A policeman observes him and finds his behaviour strange and asks him what he is doing. The old man explains his dream to the policeman. The policeman laughs and tells the old man that his story is nonsense because we cannot follow our dreams and continues to tell him that he himself just dreamt about an old man who found golden treasure hidden behind his stove. The old man then replied thanking the policeman, returned to Cracow, looked behind his stove, and found the hidden treasure. In my interpretation, the lesson of this folk tale (and that in many ways represents my own attitude and approach in research) is that we need the construction of realities from and by others, for example by our Central European neighbours, in order to find our own good fortune and through a process of mutual inquiry, the process of exchange, understanding, and cooperation.

## References

Dahlgren, L., O. & Szczepanski, A. (1998) *Outdoor Education. Literary education and sensory experience*. Linköping: Kinda Education Center.

Glaserfeld, E. v (1995) A Constructivist Approach to Teaching. In L. P. Steffe and J. Gale (Eds.) *Constructivism in Education*. Lawrence Erlbaum Associates, Publishers

Jonassen, D. (1991) *Evaluating Constructivist Learning*. Educational Technology, 36(9), 28-33.

Köpke, A. (1995) *Die Reform muß weitergehen. Wider die Lernunkultur an unseren Schulen*. PÄD EXTRA, 6, 39 - 44.

Reich, K. (1996) *Systemisch-konstruktivistische Pädagogik*. Neuwied, Kriftel, Berlin.

## **Environmental Education: An overview of the area from a Swedish/Nordic perspective**

*Anders Szczepanski  
Linköpings University*

Outdoor environmental education is a thematic and interdisciplinary field of education in the natural and cultural landscape. Through thematic studies and activities in the landscape, outdoor environmental education tries to animate the often abstract concepts of the subject disciplines, and thereby create a local, ecological, historic, physical and social sense of place among children, students and teachers (Dahlgren and Szczepanski,1997).

*Practical knowledge* is mastered through authentic activities in authentic contexts. An extended pedagogical activity in the outdoor s results in a more vivacious educational perspective. In concrete environmental work departing from direct experiences that will give the children, students and teaching staff unique knowledge.

*A place and means:* The concept of outdoor environmental education acknowledges the importance of selecting an appropriate place for education as well as a technique or means of learning. In this setting students learn directly about the relationship of knowledge to the physical reality of the place. This is achieved through biochemical, social, and cultural dimensions whereby that which is known has a past, present and future.

Through these means students learn about the key importance of relationships and respect for the learning and teaching process. This process begins with personal experience "the soul in the soil" perspective and leads to deep questioning in the context of landscape. This is of great importance and acts as a norm supporting structure and base of environmental knowledge, and learning about water, air , soil and recycling with children and young people.

Contemporary ideas of sustainable development in different human fields of activity presuppose a deep and elaborate awareness of the conditions for man's interaction with the environment. Therefore we want to show ways to increase activities that visualise and clarify our relationship with the landscape.

Recent studies point to evidence that more dynamic learning environments and daily physical activity promote health and prevent diseases such as diabetes, obesity, bone-weakness, and stress syndrome (caused by high levels of stress hormones, because of the impact of the learning environment).

This text is a reflection on learning in action, about my experiences from the ‘extended classroom’ in the context of teacher training university courses. It considers how practical environmental learning, in the out-of-doors is an important motivation factor and starting point in cyclic thinking, leading to taking responsibility for health and sustainability.

The didactic situation, the where, what, how and why portrays learning as a part of the landscaping process. An outdoor environmental education course tries to shift the perspective against pedagogical diversity, sustainable learning through the landscaping process. Thus, landscape is defined as the individual’s perceived surroundings which include what the subject sees, smells, hears, feels, tastes and senses in the meeting with her/his environment.

Humans are in the world by means of their, acting learning bodies. The mobile, sensing and creative relationship between humans and landscapes is called ‘landscaping’. Often an underestimated and hidden part of the learning process in teacher training courses about environmental education. We need to see the new generation as messengers and not victims in, about and for the environment.

### **We need the whole body**

Eyes can see, ears they hear  
but hands know bests how it is to touch.  
Your skin knows best when somebody is close.  
You need your whole body to learn.

The brain can think and maybe understand,  
but your legs know best how it is to walk.  
Your back will know how it feels to carry.  
You need your whole body to learn.

If we are to learn the basics about our planet Earth,  
then it is not enough with words.  
We must be able to get in close.;  
you need the whole body to learn.

*(Unknown author)*

The ultimate goal of outdoor environmental education and ecological learning, other than to generate knowledge, is to develop students’ awareness and concern about the whole ecosystem and its associated problems. Direct nature experiments are widely acknowledged to enhance environmental awareness and to foster sympathetic attitudes. It is an essential goal of such educational approaches to produce an environmentally knowledgeable citizenry that is competent and willing to take action.

A very important aspect of outdoor environmental education should be the development of attitudes, responsibilities, and appreciation towards nature and the environment, which may be best achieved by means of affective rather than cognitive methods. The environment is something linked to us, it is not a reality separate from ourselves, and therefore it has to be understood as a social construct. Consequently, consideration of environmental concern always ends in consideration of human behaviour.

Environmental resources (air, soil, water) are common property in the 'global village', and the consequences of their use are social problem. Therefore, individual learning must take place within this context and must not occur in a social, political, or historical vacuum.

Present studies indicate that outdoor environmental education programmes of five weeks or ten days duration can influence a student's behavior toward a more positive environmental attitude, provide the intervention is of sufficient duration. Training in environmental citizenship is complex and a long-term one. The current ecological crisis is a crisis of maladaptive behavior. People's daily lives are separated from nature in 'normal' reality, and they need to be linked to it again (Rickinson, 2001)

The main sources of young people's environmental information are television and school. Other origins of information are the printed media, family and friends and non-governmental organisations (NGO:s). There is a strong evidence across a number of studies that television is the major source of young people's environmental information. Television and school are the most important sources. There are also several studies that report treatment effects relating to environmental education initiatives in the form of outdoor courses. This study provides clear evidence that participation in an outdoor ecology programme, did effect positive change in students', environmental knowledge, attitudes and behaviour. Compared with a control group that received classroom education. Increased sensitivity for the environment and more caring attitudes, 'the formative processes'. An awareness of the nature, underlying patterns and origins of such pre-existing ideas should be helpful in designing more effective teaching strategies.

The kind of educational programmes that have been investigated include residential field courses undertaken by school groups at outdoor education centres (Henderson, 1986).

A common problem in environmental education out-of-doors is that children cannot relate the scientific content of their lessons to the social world they inhabit. Secondly, the hands-on experience they provide is often to consider the symptoms of problems, (such as measurement of air pollution or pH) rather than the environmental problem itself, which is in society, not in the environment.

There is evidence that learning outcomes in terms of changes in the students' environmental knowledge and/or attitudes and also behaviour can be generated by certain programmes through learning processes such as direct experience on outdoor courses and thematic interdisciplinary work in classroom lessons. This suggests that a wider curricular context for environmental education is important to students, and more studies that explore young people's preferences relating to outdoor learning activities are required. Through case studies in Denmark, England, Portugal and France we have evidence that young people can influence the environmental behaviours of their parents, through 'action competence', but this does not happen automatically. In all education it is therefore important to look for the effects, and their durability over time (Bagner, 1998).

Some studies about outdoor education promote a more solid grasp of the concepts than a similar environmental curriculum taught in a traditional classroom setting. We have a lot of connections between the affective and cognitive domains in the process of learning. Outdoor education, environmental education and nature education, all interrelated terms, are particularly beneficial to elementary students and early adolescents because the activities promote problem solving, risk taking, leadership training, self-confidence and teamwork along with the necessary cognitive skills. These characteristics are attributes in which adolescents are still at the stage of developing.

Educators all over Europe must utilize the natural resources in the urban and rural areas and make the outdoors available and integral part of their curriculum. I see this as the European dimension for sustainable holistic learning. The young mind is full of curiosity and unanswered questions. Youth as well as adults need to interact responsibly with their environment; conserving natural resources, preventing pollution, etc. Learning is the result of experience and any system which promotes a hands-on and experiential approach to learning is bound to promote and foster a more joyful and positive attitude towards learning. However, in order to fully grasp the concepts and understanding the varied and different ecosystems, cycles, processes and environments surrounding us, one must become involved in the experience. Education of the student or child should follow the old axiom: *"I hear and I forget; I see and I remember; I do and I understand"*.

There is a global threat against health if we do not change our relations to nature. In outdoor environmental education the learner is not a victim, but a messenger for sustainable decisions on environmental health, personal and social development for living and sustainable learning in the global world. The theoretical framework is research about the relationships between man and the physical environment with focus on the place of learning, concentration and learning in the out-of-doors, environmental awareness, health and development of motor skills. Research indicates that the most creative environments for learning, developing motor skills, concentration and learning, are unstructured green and variable environments. In such studies there was also a

decline in children's infections (Grahn et al 2000; Dahlgren and Szczepanski, 1997). There is a clear correlation between activities and places. Places create activities. This is one motivation for increased use of the environment out-of-doors for pedagogical purposes. The belief that learning occurs only in a specified time and place (the learning environment of the classroom) is as incorrect as believing outdoor education to be the only road to knowledge. In all subjects and themes in school, we can identify many and clear relationships with the landscape, literature, arts and music.

To increase motivation outdoor environmental education is supplementing the classroom situations with the 'extended classroom'. In this respect, the playground, schoolyard, nature and culture, and society becomes as important a learning environment as classrooms and other rooms where learning take place. From the perspective of the didactic (the where, what, how and why of learning) research practice, outdoor environmental education sets questions about the concepts of education or learning in an attempt to capture the nature of the view of the world . The approach of outdoor environmental education becomes knowledge as an activity, 'to grasp something to grasp' at the location, often the landscape defined by nature and culture, where phenomena occur in their natural contexts. A very important sphere of interest for outdoor environmental education is therefore connected with environmental awareness and health issues as a part of education.

Contemporary ideas of sustainable development in different human fields of activity presuppose a deep and elaborate awareness of the conditions of Man's interaction with the environment. Sustainable learning must increase hands on and minds on pedagogic activities that visualize and clarify our relations with the landscape. The sensory education's road to knowledge demands a bodily meeting. The body and mind have to meet the Earth ('the soul in the soil perspective') to contribute towards a sustainable community and develop a more environmentally conscious attitude towards land use.

There is also in the mirror of outdoor environmental education a new understanding of the need not only to teach theoretical knowledge about the environment, but also to allow pupils to translate this knowledge into practical action in the school setting. The knowledge they acquire had to be translated into personal experience.

Environmental problems and their effect on health are often defined from the viewpoint of natural sciences, as 'breaches of ecological rules', but these should perhaps rather be referred to as interference with nature'. Environmental problems are social conventions and presuppose a social context. It is primarily the task of the behavioural and social science to investigate if outdoor environmental education can be a path to sustainable development and environmental citizenships.

The health pedagogic perspective is perhaps one of the most important methodological tools for working with outdoor environmental education. The sensory education's road

to knowledge demands a bodily meeting. We have as humans the 'stone age man's' needs for movement in today's sedentary society. Outdoor environmental education counterbalances the 'turbo families' development of new 'boneless generations'. People in modern-day society have become less and less physically active, which has had severe effects on the growing child and youth. The effects are connected to increased blood pressure, obesity, stress and suffering from arteriosclerosis.

Recent studies point to evidence of more movable learning environments and daily physical activity promoting health and preventing disease as diabetes type II, obesity, bone-weakness (osteoporosis) and stress syndrome, caused by high levels of stress hormones (cortisol). My Centre for Outdoor Environmental Education, in collaboration with a number of government agencies and organisations, was engaged in the national project 'Sweden on the move', commissioned by the Swedish Government to increase physical activity in the year 2001. This project continues in 'Move for Health 2002' where school is supporting environment for physical activity and children of pre-school are stimulated to daily physical and play out-of-doors.

A national curriculum for teacher training education in outdoor environmental education towards health, diet, physical activity and learning was produced. The programme has a health promotion and disease-prevention perspective. Effort will concern increase of knowledge and knowledge dissemination, education and method development. A rapid transition in lifestyles leading to reduced physical activity and changing diets is present in all societies, rich and poor, developed and developing. A major cause of cardiovascular diseases and obesity is lack of physical activity. The World Health Organisation (WHO) estimates that lack of activity leads to more than 2 million deaths per year. In diverse countries as Finland, China and the US, studies have shown that even modest lifestyle changes are sufficient to prevent the development of almost 60% of type II diabetes cases. We believe like WHO that this is the time for global debate about environmental health and learning environments in our urban and rural areas all over Europe. I see the connection between environment, health and outdoor education as a European dimension.

## **Key publications**

Szczepanski, A. (2000) EOE, Forth European Congress for Outdoor Adventure Education and Experiential Learning, Rimforsa Sweden 2000, *What is Outdoor Education? - The Didactic Implications of Learning on the Context of Landscape.* (p17-24) in Report European Institute for Outdoor Adventure Education and Experiential Learning. <http://www.eoe-network.org/> Marburgh Public 2001.

Dahlgren, L-O. & Szczepanski, A., (2001) Outdoor Education - Authentic Learning in the Context of Landscape Kinda Education Center No2, *Outdoor Education - The Didactic description of the Where, what, how and why of Learning* (p50-58)

Szczepanski, A. (1999) *The pedagogy of Outdoor Life - for knowledge, sense and life quality*. Outdoor education (p23-29). Liber L. ISBN 91-47-04946-4

Szczepanski, A. (1998) *Outdoor, Adventure and Experiential Learning - A Wreath of European Concepts*.- Third European Congress Report Scotland Edinburgh oktober 1998. Outdoor Education - Interpretation in a Pragmatic and Hermeneutic Perspective (p 26-30) Marburg University Public 2000.

Dahlgren, L.O & Szczepanski, A. (2001) *Udendørspædagogik - boglig dannelse og sanslig erfaring*, (110p) Forlaget Børn&Unge/Pedagogiskt Centrum, 2001. ISBN 87-89780-92-2.

Szczepanski, A. & Ekström, U. (1993). *Keys to Nature - With Children in the Local Environment* . (172p) Stockholm: Liber L, ISBN 91-47-00731-1

Dahlgren, L.O & Szczepanski, A. (1998). *Outdoor Education – Literary education and sensory experience*. (64p) Kinda Education Center No1 ISBN 91-7871-979-8-X

Website: <http://www.liu.se/esi/>

# **The Landscape of the School Ground**

*Sue Fenoughty*

*National Association for Environmental Education UK*

## **Introduction**

A child's first sight of school is the gate, which leads through the grounds to the school building. What is that child's first impression of the landscape around the school? The school grounds, for many urban children starting formal education, could be the first outdoor landscape where they have the space to develop their physical and social skills both through formal and informal play with their peers, and where they can experience the natural environment at first hand - their first stepping stone to understanding the wider environment beyond. The school grounds experience could make or mar a child's attitude towards the outdoors in later life.

## **The Barren Landscape of the School Grounds**

In the UK, the school grounds are often the school's biggest but most neglected 'classroom'. Traditionally the tarmac playground has been seen as a space where primary children are sent during lunch and lesson breaks which can add up to 28% of the school day. If the school is fortunate enough to have a field, this comprises short grass to enable sports to take place in the summer term, and team games, such as football and hockey, in the winter. Most of the year, the grass is 'out of bounds' during recreation breaks as it is 'too wet', and some schools have sold off their playing fields altogether to pay for repairs and improvements to the school buildings. Large numbers of children are constrained to 'play' on a small tarmac yard, and this lack of space frequently results in accidents and behaviour problems. Some schools have cut the mid-afternoon play break because of these problems, and children spend the second half of the school day indoors.

This barren landscape is unlikely to stimulate a child's desire to spend much time in it, and given the choice between going out or staying in during recreational breaks, many choose to stay indoors.

Perhaps one good factor about a barren landscape is that it provides an empty canvas upon which a school can develop its own 'vision plan' for change.

## **The Need for Changing the School Landscape**

Just over a decade ago, Lord Elton's *Report on Behaviour & Discipline in Schools* (DES, 1989) was circulated around schools in the UK; it concluded that the quality of the environment affects the quality of pupil behaviour. This struck a chord with head teachers, who admitted their schools were having increasing problems with behaviour during the midday break in the playground – could it be that there was nothing for

children to do outside, in the ‘concrete jungle’? The following year (1990) the ‘*Learning Through Landscapes*’ charitable trust was set up which drew the nation’s attention to the dire state of Britain’s school grounds and the need for change. Its research contributed to the government’s publication of ‘*The Outdoor Classroom*’ in 1990 and ‘*School Grounds, A Guide to Good Practice*’ in 1997. LTL has since supported several publications showing schools how they can teach over 50% of the national curriculum in the school grounds. Their report in 2000, ‘*Grounds for Concern*’, is the result of research on the state of school grounds around secondary schools; it reveals that the majority of sites are ‘bleak, featureless places’. Researchers found that many pupils saw the facilities outdoors as ‘unacceptable’ and preferred to remain indoors during recreation periods. Several secondary schools are now selling off their playing fields to pay for indoor sports halls.

## **The Curriculum in the Outdoor Classroom**

Outdoor environmental education develops knowledge, attitudes and skills across the whole curriculum – it is knowledge **about** the environment (‘Head’), developing skills through going out **in** the environment (‘Hands’) which in turn creates the caring attitudes needed **for** the environment (‘Heart’). The approach to education was originally proposed by the Scot’s polymath Sir Patric Geddes see also pages 38-48. Many aspects of the curriculum especially in science, geography, physical education and art can only be taught effectively through outdoor experience, and the school grounds are the obvious place to start. Teachers need the confidence to use this ‘outdoor classroom’ but unfortunately the environmental education module in teacher-training courses has disappeared from most UK colleges. ‘In-service’ courses, therefore are extremely valuable to give teachers the confidence and expertise to develop learning opportunities in the school grounds, ranging from growing and caring for plants to designing and making a solar powered fountain.

## **Sustainable Development**

The school grounds –particularly around inner city schools - should provide some direct contact with the natural world outdoors to enable children to develop an understanding of people’s dependence on the balance of nature. This in turn will help us all, beginning with the school community, to adopt a more sustainable lifestyle. ‘Education for Sustainable Development’ was introduced into the English National Curriculum in September 2000, although it is not statutory. It aims to enable ‘*pupils to develop the knowledge, skills, understanding and values to participate in decisions about the way we do things individually and collectively, both locally and globally, that will improve the quality of life now without damaging the planet for the future.*’ The European ‘Eco-School’ movement encourages schools to develop action policies for environmental education for sustainable development and the successful schools can be spotted all over Europe by their ‘Green Flag’. The school and its grounds should be recognised as a potential ‘role model’ of sustainable living within the local community.

## **Design of the School Landscape**

In England, most of the population lives in an urban society, where open spaces are at a premium. Quite often, the only outdoor open space in a built up area is the school site; it is important therefore, that full use is made of the grounds to benefit the users. The design of the school and its setting should go hand in hand, but what has frequently happened in the past is that architects design the school buildings first and by the time the grounds are considered, there is little money left in the budget for landscape architects to work with teachers and pupils to create a stimulating outdoor landscape.

Grounds and buildings should complement each other to provide a stimulating environment that influences the generations of pupils who receive their education there. The inspiration and enjoyment of the school landscape should give children the incentive and confidence to step out and investigate landscapes beyond the school gates, and equip them with the knowledge, attitudes and skills to meet wider environmental challenges.

## **Appropriate Clothing**

A design factor, linking the indoors with outdoors, is to find ways of making it much easier to 'flow' directly from the classroom to the grounds outside. This could mean creating an area just inside the door to the grounds where children keep a change of clothing handy. Wearing the right sort of clothes can be a contributory factor to whether or not a child enjoys being outdoors. In Britain, many children come to school by car and they do not have a change of shoes - waterproof boots have almost become extinct. Some children wear summer-type clothing all the year round, and consequently shiver miserably in the playground during winter months. Complaints about mud on the carpet and on the children's clothes are both factors that can make teachers reluctant to take children outdoors. This means that for many of them, the prospect of being outdoors is not viewed with enthusiasm and at the first sign of rain, a school decides it's 'Wet Playtime' –and everyone stays indoors. Having the appropriate clothes to work and play outside in the school grounds gives the child the opportunity to experience, study and enjoy the outdoor landscape in all weathers and is essential preparation for more adventurous activities.

## **Physical Development**

Another contributory factor to teachers' reluctance to use the school grounds as part of the curriculum is the extra time it takes to organise a class to go outside. In England there is pressure on teachers to meet the government's educational targets and recent evidence suggests that English children are the most 'tested' in the world. With the introduction of the 'Foundation Stage' for 3-5 year olds in September 2000, learning through play has been recognised as a suitable way to achieve the six 'early learning goals'. This gives opportunities for more emphasis on the value of play outdoors and the provision of a landscape in which it can happen. Over 100 years ago, Friedrich

Froebel, the founder of the kindergarten system, wrote that '*children are like growing plants in a garden, to be cultivated according to the laws of their own being, of God and of Nature.*'

In the meantime there is growing concern about signs of stress among primary children, and the low fitness levels of British children – one of the lowest in Europe. '*British children spend more time per day watching TV and playing computer games than their European counterparts*' (London School of Economics Survey of 1000 youngsters, 1999). Many youngsters lead what could be described as an artificial 'box-like' existence: going from a box (the home) in a box (the car) to a box (the school), where they are often attached to a box (the computer), then back in the box (the car) to the box (the home) where they spend 2 or 3 hours attached to another box (the television, video or computer). '*Schools should redesign their playgrounds to encourage more physical activities and play*' recommended the British Heart Foundation in its report last year, '*Couch Kids - the Growing Epidemic*'. The Report states that one in three primary schools has cut the amount of time devoted to physical education, with some children only receiving 12 hours of PE in a year. Given these concerns, growing children need physical activities outdoors for the sake of their physical health and well being, as well as for interaction with the natural environment. The school grounds can provide a starting point for this to happen.

## References

- Adams, E. (1990) *Learning through Landscapes*; a report on the use, design, management & development of school grounds.
- Billimore, B., Brooke, J., Booth, R., & Funnel, K. (1990) *The Outdoor Classroom, Building Bulletin 71*. Dept. of Education & Science. HMSO.
- Blatchford, P. & Sharp, S. (1994) '*Breaktime and the School: Understanding & Changing Playground Behaviour*' pub. Routledge.
- British Heart Foundation: (2000) Report '*Couch Kids – the Growing Epidemic*'
- Brooke, J. et al (1997) '*School Grounds: A Guide to Good Practice*' Building Bulletin 85. DfEE. HMSO
- Department Of Education & Science (DES) (Elton Report) (1989) *Discipline in Schools*, Report of the Committee of Enquiry chaired by Lord Elton, London. HMSO
- Fenoughty, S. (1997) *The Garden Classroom*: Winston Churchill Travel Fellowship Report on School Grounds in Northern Europe
- Learning Through Landscapes (2000) *Grounds for Concern*: Report on the condition of secondary school grounds.
- Ross, C. & Ryan, A. (1993) '*Can I Stay in Today, Miss?: Improving the School Playground*' Pub. Trentham Books.
- School Curriculum & Assessment Authority (SCAA) (1996). *Teaching Environmental Matters through the National Curriculum*. SCAA Publications.
- The National Curriculum: Handbook for Primary Teachers in England (1999). [www.nc.uk.net](http://www.nc.uk.net). DfEE & QCA. HMSO
- Revell, P. (2000) '*Why selling games fields can lead to better sport*' (article in Times Educational Supplement, 2.6.00)

# **A Framework for Evaluation of Outdoor Education Programmes**

*Robbie Nicol and Peter Higgins*  
*School of Education*  
*University of Edinburgh*

## **Abstract**

This chapter discusses the terms commonly used in personal and social education. It considers issues of evaluation and provides a framework for thinking about these terms and the claims made for personal development in outdoor educational programmes.

The key points are:

- Outdoor adventure provides one important way in which personal and social learning outcomes may be achieved but caution should be exercised over the claims.
- Terms used to discuss personal and social education are often poorly defined. Here we define and use the terms self-esteem, self-awareness and inter-personal relationships. We argue that in the design of programmes it is always important to consider aims, assumptions, methods, content, evaluation and claims.
- Reflective professional practice is central to this process. To this end we should repeatedly ask ourselves the questions:
  - ‘why am I doing this activity with these individuals at this time?’
  - ‘what does theory and experience tell me about the choice of activity and what young people are learning?’
  - ‘how do I know if I have been successful in achieving my stated aims?’

## **Introduction**

Outdoor adventure education in its various forms has so far received relatively little research attention. This has led to claims which are disproportional to the evidence in support. This does not mean that such claims are ‘wrong’, rather that they lack the discipline imposed when there is an evidence based approach. Such evidence does not always require empirical study, often the application of rigour in arguments and claims will suffice in establishing a rationale for a programme. Claims are often expressed in terms of personal and social education, a field which is particularly difficult to research. This chapter discusses the terms commonly used in personal and social education and considers issues of evaluation. It provides a framework for thinking about these terms and the claims made for personal development in outdoor educational programmes.

## Personal and Social Development Objectives

Given the variables already discussed it is clear that experiential learning needs clear educational objectives. Whilst this statement seems self-evident it is complicated by the diverse range of terms used when talking about 'Personal Development' or 'Personal and Social Education'. It will be helpful therefore to look at what a programme is trying to achieve and then establish common language. Three key objectives in this respect is the development of:

- Self-esteem
- self-awareness
- inter-personal relationships

We can critically analyse these objectives by looking at them in relation to aims, assumptions, methods, content, evaluation and claims. This idea has been incorporated into the following grid (Nicol, 2001):

	Aims	Assump-tions	Content	Method	Evalua-tion	Claims
Self Esteem						
Self Awareness						
Interpersonal Relationships						

## Self-esteem

### Self-esteem: The Aims

This term has been defined as 'the value which a person puts upon himself or herself' (Scottish Office Education Department (SOED) 1993). One of the aims of many programmes is to raise self-esteem.

### Self-esteem: The Assumptions

There are many assumptions which underpin this stated aim but here are three to get started with.

- 1 Gains in self-esteem arise out of participation in adventure activities
- 2 Self-esteem is raised when people feel good about themselves
- 3 Such feelings are closely linked to personal achievements and success

### **Self-esteem: The Content**

It is important to make explicit the assumptions which underpin practice so that the appropriate content can be chosen to achieve the stated aims. The dominant theme throughout the three stated assumptions is the feelings that young people should experience are those characterised by self-worth. The choice of activity must therefore be one where young people will *experience success*. Whilst there are many ways in which such activities are used there is broad agreement that the process comprises most or all of the following elements.

### **Self-esteem: The Methods**

However, this relationship between activity and feelings of success depends upon both definition and evaluation since what is an achievement or success for one young person may not be for another. Moreover, what is deemed an achievement or success will vary from one instructor / teacher to another and situation to situation. The issue here is who controls the experience? Where there is a dominant role for the instructor / teacher, the instructor / teacher is excluded from the experience of the young person. In this way the instructor / teacher becomes the purveyor of experiences and acts as a gatekeeper deciding on what constitutes quality experiences. By using models such as Kolb's the instructor / teacher can plan to promote new experiences based on previous experience in order to achieve the stated aim.

### **Self-esteem: The Evaluation**

Self-esteem has attracted the most research attention in outdoor education programmes where the findings suggest that these are notable and with lasting effects. However, it is fair to say that a lot of this research has not taken note of the differences that this table highlights. Consequently, the terms self-esteem, self-concept, teambuilding, co-operation, personal and social education (to name a few) can be treated as if their meaning is homogeneous. This is the same as comparing apples with oranges and saying they are fruit. Of course an apple tastes nothing like an orange.

### **Self-esteem: The Claims**

The claims relate to self-esteem therefore are not as clear as they might be. It remains the case that much of what is claimed of outdoor activities is on the basis of anecdotal evidence.

## **Self-awareness**

### **Self-awareness: The Aims**

There is a strong connection between self-esteem and self-awareness since they both relate to the personal. In order to distinguish between the two think about the example above where it is possible to argue that someone may enjoy breaking into and stealing cars with a consequential raising of self-esteem. The important question therefore is not whether self-esteem is being raised but the values context in which actions attributed

to self-esteem are considered. Where the hedonistic aspect of self-esteem is allowed to dominate without taking note of this context the situation arises where young people are not confronted with selfish desires, nor are they required to consider the consequences of their actions.

In other words, if aims relating to self-esteem are to extend beyond superficiality and everyday desires there are times when young people cannot simply do as they wish. Young people may, by instinct or preference, want to pursue their own desires but there will be opportunities where instructors / teachers can use these desires as a baseline to explore the young people's inner world in relation to their perceptions of the outer. The way that instructors / teachers operationalise the concept of self-esteem might therefore get in the way of developing self-awareness in young people. If, for example, self-esteem is the sole indicator, the theft of cars could be seen as contributing to this aim. However self-awareness looks at the values in which actions are considered. It therefore becomes a higher order aim concerned with how 'actions are influenced by values, attitudes and past experiences' (SOED, 1993). Furthermore, through a process of reflection young people may engage in self-assessment to become aware of their own values. In this way young people become equipped to take decisions and make choices in applying this knowledge in future situations. Self-esteem is, therefore, to do with feelings embodied in the statement that 'young people have high self-esteem when they feel good about themselves and their achievements'. On the other hand self-awareness has a values and action context (SOED, 1993).

### **Self-awareness: The Assumptions**

The view that self-awareness has a values context means little unless there is common understanding as to the meaning of values. This will be a point of discussion throughout the conference. Some of the assumptions underpinning this aim are:

- Self-awareness arises out of participation in outdoor education programmes.
- This aim requires the clarification of values through a process of action and reflection.
- Being self-aware acknowledges the extent to which the individual has the power to act.
- This understanding of self allows the individual to contribute to the growth of society.

### **Self-Awareness: The Content**

Because the development of self-awareness depends to a very large extent on the clarification of values it follows that success depends on the facilitating skills of the instructor/teacher. The choice of activity needs to allow for discussion based content at appropriate times throughout the programme.

Consequently, we can suggest that some activities may be better than others in developing self-awareness. Activities such as kayaking, climbing, abseiling and high ropes

are all either excitement led or require a degree of concentration on technical elements. Such activities require greater intervention on the part of the instructors/teachers in order to cultivate appropriate moments for discussion on issues other than the activity itself. This differs in both structure and content from issues, which research shows, arise more naturally and are often pupil led during hillwalking. This is not to say that activities such as kayaking, climbing, abseiling and high ropes should not be used as the issues of content and structure can be overcome with a little creativity on the part of the instructor/teacher. Alternatively, the question needs to be asked, if self-awareness is the aim then in what way does the activity serve this aim? Furthermore, if certain activities are not seen as consistent with the aims they are supposed to achieve then do they have a place in the programme?

### **Self-awareness: The Methods**

In terms of methods there are two possibilities; either, the experience of being on this an outdoor programme will lead young people, on their own initiative, to consider these worldly issues. Alternatively, for the experience to make sense, it has to be mediated by the instructor/teacher. From what has been said it is clear that the instructor/teacher has a pivotal role in this aim. This has most famously been stated by John Dewey who said ‘the *effect* of an experience is not borne on its face. It sets a problem to the educator (Dewey, 1963). Failure to acknowledge this means the loss of learning opportunities. In this sense the instructor/teacher is the method whose responsibility it is to mediate between the experience and wider social values. Otherwise programmes can be dismissed as one-off endeavours.

### **Self-awareness: The Evaluation**

From the definitions expressed here it is now clear that self-esteem is in itself a poor aim for a programme. Its focus on the self is in danger of providing excitement led activities which over-inflate the sense of self. Therefore young people succeeding in an activity is not a reliable indicator of anything other than competence in that activity. On the other hand self-awareness promotes the sense of self but in relation to other people and the values of society. Any evaluation that takes place needs to allow for these differences. Evaluation in this sense can range from the instructor reviewing a day’s activity to the evaluation of the programme itself.

### **Self-awareness: The Claims**

Looking at the four assumptions listed above it is clear that there are different levels of assumption. These have been purposely ordered from one to four to show an increasing level of claim. In this way it is possible to show the enormous diversity and magnitude of aims consistent with self-awareness. However, if the four assumptions above are to be considered as legitimate aims many programmes then it seems reasonable to talk about the limits of the claims that can be made.

The number of the assumptions suggest a scaled hierarchy. At the lower end research has shown how young people at an outdoor centre have demonstrated a sense of em-

powerment simply from tying their own shoe-laces as opposed to having them tied by their parents at home (Nicol, 2001). This is in keeping with the idea that self-awareness is linked to the extent to which the individual has the power to act.

At the other end of the scale assumption four states: 'this understanding of self allows the individual to contribute to the growth of society'. Assumptions one and two are, in a sense, self-contained which means that the instructor can deal with them within the scheduled five-day programme. The problem with assumptions three and four is that they become increasingly distant from the immediate context in which they are considered. They depend on variables outwith the understanding and control of instructors. The challenge therefore is to establish structures to find out if any of these young people are empowered to act beyond the context of the five-day programme.

## **Interpersonal Relationships**

### **Interpersonal Relationships: The Aims**

Whereas self-esteem is to do with people feeling good about themselves and self awareness has a values and action context, interpersonal relationships involves young people thinking about 'the different roles they have and the skills, attitudes and values which are necessary to enable persons and groups to interact effectively' (SOED, 1993). In this manner interpersonal relationships is an extension of both self-esteem and self-awareness.

The understanding of the individuals' role in groups and improvement of interpersonal skills is another of the aims of many programmes.

### **Interpersonal Relationships: Assumptions**

There is a view within outdoor education that activities like ropes-courses promote interpersonal relationships. The idea being that young people can assist each other over obstacles. There is then some tangible outcome when the task is achieved and the group can then be attributed with certain levels of interpersonal skills.

### **Interpersonal Relationships: The Content**

However, the relationship between the aim (interpersonal skills) and the activity (ropes course) is not always clear. For example, helping each other over obstacles could be an indicator towards developing interpersonal skills. This logic would suggest that by engaging in acts of mutual help young people would establish new and meaningful relationships with each other. However, depending on one's starting point the opposite might be true. That is to say, building relationships between a group of people may well enable that group to help each other over obstacles.

At this point we can distinguish between two forms of interpersonal relationship. The first is where good personal relationships are an end in themselves. In this sense the

ropes course would appear to be an appropriate activity to develop such skills. This is to say that the aim does not extend beyond the activity in hand.

However, this must be seen as only part of what interpersonal relationships are about. If the task is to look at interpersonal skills within a values and action context then this needs to be made explicit at the start. This is because the purpose of the activity is to give insights into the young person's world beyond that of the immediate context. Consequently, completing a ropes course on its own will not lead to such learning outcomes.

### **Interpersonal Relationships: Methods**

It is the instructor / teacher (not the activity) who is instrumental in achieving the desired aim relating to interpersonal relationships. This means that the instructor / teacher has a role beyond that of the technical aspects of keeping young people safe and giving them a good time. This is an important distinction to be borne in mind because a range of contradictory views exist as to what it is that the activities are designed to achieve. As with self-esteem and self-awareness the activity needs to be carefully chosen to meet the aim. Similarly, the quality of the relationship that the instructor / teacher has with young people is central to mediating between the aim and the learning outcome.

### **Interpersonal Relationships: Evaluation**

Evaluation of interpersonal skills presents certain logistic problems to providers. When young people attend this a programme the instructor/teacher often knows little of their background and does not have the opportunity to see them after the programme. Consequently, providers are limited to what they see on the programme. It is clear therefore that there are significant benefits in providers developing this aspect of the a programme (eg through longer term relationships and the use of 'personal advisors' for the young people).

### **Interpersonal Relationships: Claims**

Research has shown that certain providers of outdoor programmes have given little thought to the relationship between aims, assumptions, content, methods, evaluation and claims. This has resulted, in some cases, in a combined problem of unchallenged assumptions and overstating the ability to achieve aims. For example, terms such as 'teamwork', 'trust building', 'bonding' and 'building relationships' have come to be valued because they are believed to legitimate the work already done. The assumption is that young people can return to their community with the appropriate experiences to fulfil a variety of interpersonal roles. This is very different from consciously setting out to achieve something and establishing means of evaluation in order to make claims of programmes. Using the above table as a thinking tool it is possible to avoid these mistakes.

## **Concluding Comments**

In proposing this framework it is not our intention to place obstacles in the way of those who run outdoor educational programmes. Rather we hope that by discussion of the aims, assumptions, content, methods, evaluation, and claims programme designers will have a logical framework and sequence for thinking about their work. Perhaps because of the limited research evidence, current practice has tended to make the claims without the early stages in this process. In the light of increasing funding difficulties and curricular constraints on time out of the classroom, we believe it is vital for the future success of programmes that any claims are laid on solid foundations.

## **References**

Dewey, J. (1963) *Experience and Education*. London: Collier-Macmillan.

Nicol, R. (2001) *Outdoor Education for Sustainable Living?: An investigation into the potential of Scottish local authority residential outdoor education centres to deliver programmes relating to sustainable living*. PhD Thesis: University of Edinburgh.

SOED (1993) *Personal and Social Development*. Scottish Office Education Department: Dundee.

## **PART 2**

# **THE COMENIUS PROJECT AIMS, PROGRAMMES AND EVALUATION**

# Outdoor Education – authentic learning the context of landscapes: project philosophy, aims and group processes

*This report was prepared by all project partners<sup>1</sup>*

## Aims

The purpose of this project was stated in the funding application to the European Union as follows.

This project will find, compare and develop different perspectives on learning through landscapes in the participating countries and use this knowledge in developing a continuing course in outdoor education within the European teacher training programmes. By highlighting and sharing the historical/pedagogical roots of outdoor education as well as the research and empirical evidence of the health perspectives for motor skills, concentration and personal growth we aim to raise interest for the pedagogy of outdoor education. This project will increase pedagogic activities that visualise and clarify our relations with the European landscape.

We aim to show that outdoor education becomes knowledge as an activity, to ‘grasp something to grasp’ at the location (the landscape) and this is a pedagogical tool for improved learning results. This will give special advantages to children with special needs. We will show how modern information technology and outdoor education can unite in creating tomorrow’s school, a meeting between an analogue and digital reality in meaning full learning (although our project did not fully achieve this aims it remains an area for future development).

By understanding the hands-on-concept we will show how the aesthetic impact in the context of the urban landscape will affect learning.

The project time is two years (the project was granted an extra year’s funding and is explained below). We agreed that by the end of **year 1** we would, by working trans-nationally, co-operate to develop, and compare:

- a documentation of the field of outdoor education where each participating partner has contributed papers. This documentation will give a good overview of the field of knowledge as to the nature, science, historical, cultural, aesthetic, social and pedagogical perspectives.
- a good overview of the recent research results in outdoor education

---

<sup>1</sup> Dusan Bartunek, Britte Brügge, Sue Fenoughty, Dave Fowler, Margrit Hensler, Peter Higgins, Heike Laschinski, Iris Löhrmann, Marianne Neißl, Jan Neuman, Robbie Nicol, Clemens Seyfried, Anders Szczepanski

- a good overview of outdoor education methods
- have the outline for an in-service course of outdoor education for European school staff based on the pedagogy of experiential learning where nature and culture in the urban and rural landscape is the learning context.

**Year 2** would create an in-service continuing course in outdoor education for school staff, which will be arranged as a pilot course within the teacher-training programme.

The direct target group is educational staff in all the participating European schools. In year 2 the target group will be all school staff and teacher training institutions in European countries.

**Year 3** The focus of this year would be the urban landscape. By employing outdoor based methodological and pedagogical concepts we seek to provide opportunities for the growing number of city-based young people to maintain contact with, and develop an understanding of, the wider issues affecting their relationship with local and wider environments.

The project partners convened for the first time in the Sweden, the country which successfully submitted the project proposal to the EU. For the first two days participants were given the opportunity to talk about themselves, where they worked, their own country and their ideas about outdoor education. This allowed for a cross-cultural discussion of ideas and came to focus on how these perspectives could be developed into proposed courses.

As a result of these discussions one key theme developed which distinguished between some of the group on the one hand who wanted to define the concept of outdoor education and those who felt that any homogeneous definition defied the cross-cultural perspective we were trying to develop. This issue was never resolved at a theoretical level and this should not be seen as a failure of the group. This is because one thing that we had to be careful about was not to define outdoor education amongst ourselves in a way that excluded the participants coming on our courses. We expected that teachers would come from a variety of social backgrounds and teaching contexts and it was important that the course was appropriate to every participant's home setting.

It was also important to recognise that the ideas relating to outdoor education remain contested and some would argue culturally specific. Consequently singular definitions may in fact be harmful to the programmes being developed. In any case the group moved on from theoretical debate to put these ideas into practice. In this way the group could define what they meant by outdoor education in terms of the courses they run. This may be seen as the difference between deductive reasoning (starting with the theory) and inductive reasoning (starting with the practice).

## Method Used to Establish the Context and Themes of the Project

This is a short description of the particular way in which this group established itself, conducted its business and set itself tasks. In particular it relates to the meeting at Rimforsa where it became apparent to the group members that the process we were engaged in (through developing a European teacher training in-service course) was the very process we expected of the in-service course.

In the early stages one of the most interesting aspects of the course development was the discussions which revolved around defining outdoor education. The following model is promoted by the European Institute for Outdoor Adventure Education<sup>2</sup>. This has as its basis the understanding that outdoor education comprises outdoor activities, environmental education and personal and social education. These intersect with one another and the relevant activities (selected as being appropriate for the particular group at the particular time) all take place within a framework of safety.

### THE RANGE & SCOPE OF OUTDOOR EDUCATION



This model helped to focus the group's thoughts and as a result, four themes emerged which would help us define our project. The group then split into four to work on a task each and the group's deliberations are recorded below.

1. Philosophy of Education (to become the Introduction in the course booklet)
2. Student Outcomes i.e. what would we like the students to achieve?
3. Teacher Qualities i.e. what qualities do we expect of the teacher?

---

<sup>2</sup> This model was developed by Peter Higgins and Chris Loynes and may be found In P. Higgins, C. Loynes & N. Crowther (eds). A Guide for Outdoor Educators in Scotland, 6-8. SNH: Perth.

The *fourth group* worked on Course Content (i.e. what are the aims behind the subject matter chosen for the Course Target Group (practising teachers working with young people between the ages of 6 and 16 years)? This involved consideration of the proposed and actual programmes conducted during the project and consequently is a substantial section. *For clarity this is separated from the other three sections.*

## **1. Philosophy of Education**

### **A 'Place' and a 'Means'**

The concept of education 'out of doors' acknowledges the importance of selecting an appropriate place for education as well as a technique or means of education. In this 'place' students learn directly about the relationship of knowledge to the physical reality of that place. This is achieved through biochemical, social and cultural dimensions whereby that which is known has a past, present and future. Through these means students learn about the key importance of relationships and respect for the learning and teaching process.

The relationship between the teacher and learner is characterised by an open minded exchange of views between the two. This is a constructive pedagogy whereby the learners construct their own view of the world based on personal experience. A second dimension, reconstruction, recognises that the learner may wish to modify their personal experiences with reference to existing theoretical constructs. Lastly, through the process of reflection, it is sometimes necessary to deconstruct personal and theoretical constructs in order to gain new understandings. This process begins with personal experience and leads to deep questioning.

### **The Teacher**

To achieve this level of questioning teachers will be required to think about student centred approaches to learning. The learners individual interests should be encouraged, and expanded, to meet established, as well as serendipitous, aims of the programme. When the teacher has identified this interest it is then possible, through dialogue, to establish the level of understanding that the pupil already has and help build upon it in a 'constructivist' manner.

In this way the teacher and pupil are engaged in a learning relationship characterised by moving from specific aspects of knowledge to the building of conceptual understanding. This process is known as inductive reasoning. As well as facilitating inductive reasoning the teacher should be aware that there are other ways of knowing the world. Encouraging learning through the five senses allows students to learn about an object in a way that rational thinking does not. In addition to sensory knowledge an aesthetic understanding provides a fuller picture of the world and compliments the cognitive. Knowledge is incomplete without such understandings.

The teacher should be aware that the constructivist pedagogy is an alternative to traditional teaching approaches. As such these ideas may not be well received in their own schools. For this reason teachers should be aware of the process inherent in managing change in the workplace. Consequently, the philosophy underpinning this approach must be viewed in relation to the dominant values in both the workplace and wider society. It is therefore a philosophical ideal to be balanced by any constraints imposed by wider social values.

### **The Learner**

This form of understanding may be understood as the difference between knowing that and knowing how. For example, a learner having sighted a bird, will have knowledge of that bird, they may even know its name. This is an example of knowing that. However, knowing that does not explain why the bird chooses a particular habitat, nor an understanding of its place in the food chain. To know such things requires further investigation on the part of the learner either through further observations, asking someone or reading. These understandings are more easily facilitated when the learner is inspired by imagination and curiosity. Where this is absent in the learner it is the teachers responsibility to encourage these qualities perhaps by more playful means.

Another example of the difference between ‘knowing that’ and ‘knowing why’ may be drawn from the area of outdoor education known as personal and social development. The learner may be told that it is wrong to swear. If they conform they do so because they have been told and so the determining influence is external. Learners will not necessarily know why they are being asked not to swear (other than the teacher has told them). Nor will they know why the teacher holds that value. For the learner to understand why requires an understanding of the social context in which swearing is frowned upon. ‘Knowing how’ therefore requires an understanding of relationships (sometimes social, sometimes ecological) whilst ‘knowing that’ involves the collection of facts.

### **Assessment**

Traditional teaching processes normally employ methods of assessment linked to the curriculum. Where the teacher is engaged in activities leading directly to curricular outcomes then curricular methods of assessment should be employed. However, these assessment methods have focussed on the learners ability to reproduce factual knowledge. These methods of assessment are inappropriate when considering forms of knowledge gained through affective means. In such instances the teacher must ask themselves what it is they are trying to measure and why. It is also worth considering whether affective experiences need be measured at all. Since the learner is constructing their own reality it may be inaccessible to the teacher. Constructivist pedagogy recognises the existence of ‘unformulated knowledge’ implying that, in some instances, assessment may not be possible nor desirable. Imaginative methods of assessment should be considered such as rewards for effort as opposed to excellence. Also, methods of expression such as drawing, painting, poetry and other creative means can demonstrate, but do not measure, both knowledge and reflection in action.

## **A Model**

Philosophy informs the practice of education out-of-doors and sets the parameters. It is clear from the description above that people, place and activity outside the classroom are important. The model adopted to show the fundamental importance of the relationships between these is that of three interlocking circles comprising ‘activity outdoors’, ‘environmental literacy’ and ‘personal social education’. The model also defines this educational endeavour as taking place within a framework of safe and professional practice.

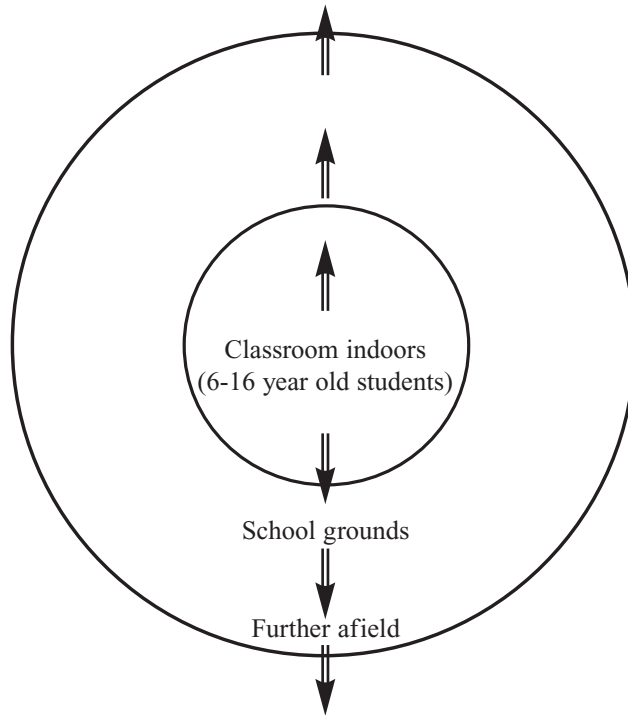
Evaluation of the contemporary views of the outdoor educational learning process reveals agreement that an experiential student centred approach encourages curiosity and reflection which the teacher may use to create enthusiasm for the subject matter. This gives room for the students to learn according to the style which best suits them, to construct their own knowledge, and for the teacher to deploy appropriate strategies to help them to do so. Sensory and aesthetic perception represent an essential means of understanding different aspects of the world. This understanding is further extended through experiences within that world. This process is normally holistic, with a focus on the relationship between people, place and knowledge. Through this model the learner should also become aware of the rewards for effort in learning and the independence and wide applicability resulting in taking responsibility for their own learning. In short, they become independent, self-motivated, holistic learners. At this point we identified the target group as practising teachers working with young people between the ages of 6 and 16 (in keeping with the original application) and that the length of the course would be no more than seven days.

## **2. Student Outcomes 6-16 years**

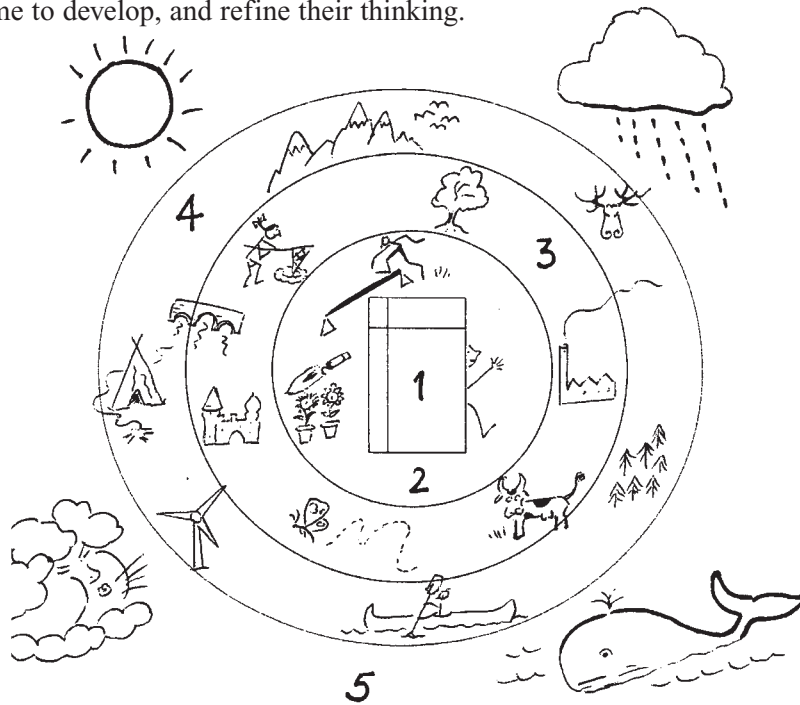
This group set out to identify the key outcomes that we would expect our courses to achieve. These reflected both cognitive and emotional outcomes which were summarised within the catchphrase of heart (meaning emotional learning), hand (meaning practical learning or learning by doing) and head (meaning cognitive learning) .

We started to develop a diagram to illustrate the student’s progressive path of experiences from outdoor education, starting with the pupil and the school:

- (1) The pupil – and what experience of outdoor education s/he already has as a 6 year old
- (2) The school grounds – how they can be used to develop outdoor education in a familiar setting
- (3) The local area – opportunities to extend outdoor learning
- (4) The wider environment – with opportunities for more challenging outdoor learning activities in contrasting environments
- (5) The global environment – with opportunities for students to use the knowledge, attitudes and skills gained from (1) to (4).



This diagram should be compared with the next in order to see the way in which the group came to develop, and refine their thinking.



- Learning Landscapes (key)
- 1 Indoor Classroom
  - 2 School Grounds
  - 3 Local Area
  - 4 Further Afield
  - 5 Planet Earth\*

A list of expected student outcomes was drawn up to show how this progressive path should benefit the pupil.

### **Heart**

- values, attitudes and personal qualities fostered by education outdoors
- adopting a sustainable lifestyle
- aesthetic appreciation of the natural and made environment
- care and concern for the environment and other living things
- confidence: sense of well-being and feeling safe outdoors
- creativity – development of ideas inspired by the outdoor environment
- curiosity and wonder about the outdoor world
- development of informed attitudes and values towards care and conservation of the environment
- develop an interest in environmental play/recreational and leisure time activities;
- increased sensory awareness
- independence of thought on environmental issues
- physical and spiritual enjoyment of being in the outdoor environment
- respect for the beliefs and opinions of others concerning the environment
- sense of personal responsibility towards local environment
- spiritual development and ability to express feelings
- tolerance and open-mindedness
- willingness to co-operate with others

### **Hand**

- skills for Life, developed in outdoor setting
- communication: expressing views and ideas about the environment
- democratic decision making
- information and communication technology: collecting, recording, analysing, interpreting and communicating information
- enquiry and investigative skills developed from first hand observations
- numeracy: data handling; interpreting statistics
- personal and social: individual and group responsibility for activities outdoors
- physical: motor skills demanded by working in different outdoor settings; specific physical skills for challenging land and water based activities (e.g. climbing, canoeing, wind-surfing etc)
- problem solving: identifying causes and consequences of environmental problems; developing balanced judgements
- study: researching, organising and planning an environmental project
- safety and survival skills
- technical: using a variety of tools (for gardening, outdoor crafts, etc) and equipment

## **Head**

- increasing knowledge (through regular, direct experience outdoors) about:
- communities: how they have influenced and been influenced by their environment
- cultural aspects of the environment
- earth's resources (use and misuse) leading to Sustainable Living
- environmental issues, leading to effective action to protect the environment (citizenship and stewardship)
- healthy and safe living
- inter-connectedness between humans and the earth
- outdoor environment (built, managed and natural)
- plants and animals in the local natural environment (leading to knowledge about European and global habitats)
- the elements (land, air, fire, water)
- understanding consequences of using the natural environment for outdoor activities

Developing students' knowledge, attitudes and skill about, in and for the outdoor environment. With increasing experience, starting from the classroom door, students assume increasing responsibility for themselves and their actions in the world about them.

## **3. Teacher Qualities**

This group worked on the concept of teacher qualities. Their brief was to consider those qualities that may predispose a teacher to want to work in this area and how those qualities may be nurtured within our course. These qualities range from the technical competencies necessary to take students outdoors to the particular qualities required to work experientially with students.

### **Competencies and Skills, Understanding Methods and Theories**

The following is based on an understanding that all course participants will be familiar with a range of educational theories regarding learning processes, their management and application; this is therefore intended as an "aide memoire". This has been written to assume that the outdoor learning experiences may take place in both the "school yard" environment or more remote areas involving adventurous activities.

Fundamental to the success of any process of achieving meaningful experiences and learning outcomes, is the ability of the facilitator to competently and safely manage both themselves and their students in the learning process and environment in which that learning takes place.

At a point where theory or dialogue turn to plans, and actions become the tangible, practical experiential activity, a number of factors are important to the success of the learning experience. Such factors become even more critical in the outdoor learning environment where other influences such as weather, student safety etc if not considered or planned could wreck the whole experience.

Whatever the nature of the experience and the level or depth of the involvement of the participants, the facilitator has to have the ability to balance their confidence, competence and skills, external factors, with an objective assessment of themselves and ask:

*What can I achieve in the time available?*

Planning and timing

- am I comfortable with the location?
- do I know my group well enough (behaviour, medical issues)?
- am I clear about my objectives?
- what external factors might influence the situation (weather, transportation)?
- do I have parental consents?
- have I written it down?

*How can I ensure all participants get the most out of this experience?*

Structure, content and safety

- am I working to the correct level (have I left my ego at home?)
- will the experience deliver the appropriate / stated learning outcomes. Am I clear in my own mind what they are?
- am I working towards the same goals and outcomes as my colleagues (if not why not)?
- have I taken all appropriate steps to reduce the risks of injury / accidents?
- am I properly experienced and equipped to work in the chosen environment especially (e.g. duty of care, first aid)?
- do I fully understand what is expected of me by my employers?
- who can I turn to for help or advice?
- do I fully understand what is expected of me by my employers?
- who can I turn to for help or advice?
- why do I perceive this as the best way of achieving the objectives?

Knowledge and understanding

- I am comfortable with the overall principle of what is to be done / achieved / delivered
- I have sufficient / appropriate knowledge
- I know where to find out if I do not know
- my methodology inspires both self and students
- my actions / teaching fulfil the stated objectives

*Am I effective in what I am doing, is there a better or safer way?*

Review, reflection and dialogue (pupils, self and others)

- do I know enough about the subject matter?
- am I managing the external influences in the most effective way?
- am I doing enough to maintain my personal preparedness, knowledge and skills at an appropriate level?
- are all the students inspired by my actions?
- who else can help me and with what?
- am I prepared to listen and learn and respond to positive suggestions of how to improve my own approach? In considering the appropriate areas outlined above, the facilitator whether at administrative level or delivery level should be able to identify several key qualities required of an individual to successfully deliver an educational programme out of doors.

The progress of this meeting can be summarised thus. It was decided that the four boxes was a useful way for us (and the teachers who come on our courses) to conceptualise the programme. It was therefore decided to, keep the four box structure but to rearrange it a little. Consequently we went from a structure of:



to:



The main reason for the change was that we had now decided that we would produce a course booklet to be handed out to every person who came on our courses. It was felt that the text within this structure would flow more easily in this order.

## **Course 1**

### **In-service training course in Sweden (May 2001)**

The course took place in the rural landscape of Rimforsa, county of Östergötland. This is an area with a lot of lakes, meadows, pastures and forest with observable cultural impacts from the Stoneage period to contemporary urbanisation.

#### **Objectives of the Course**

- to work with outdoor environment as a classroom and teaching media
- to work with outdoor pedagogy in a cross-cultural perspective
- to work with experiential based learning and sensuous training
- to develop personal and social skills through co-operative exercise
- to develop the pedagogical possibilities of the school yard in the perspective of each European school curriculum
- to gain knowledge about the theoretical basis of outdoor pedagogic, research and literature
- to draw up an activity plan where outdoor education is put into practise
- through aesthetically expressions bring storytelling to life
- to create understanding and increase knowledge of participants different pedagogical educational traditions

#### **Day 1**

On day one we focused on introductions and familiarisation looking at group relationships and processes. By focusing on people, place and activity, we explored the means to deliver potential outcomes achievable through outdoor education.

An introductory lecture provided an overview of pragmatism and practice. Knowledge of activities and education was connected to the outdoor context. The theoretical basis of these pedagogical perspectives drew on the work of, for example, J.A Comenius, E. Key, J.Dewey, J. Jordan, H. Gardner, M.Monterssori and M.Csikszentmihalyi.

The activities included:

- short introduction
- presentations – about myself and my country
- co-operative game – ice-breaker
- introduction lecture
- introducing the action plan
- participative workshops – about outdoor education

#### **Day 2**

Thematical studies of water in the landscape and traces of nature as well as culture took place. By taking part in outdoor sports and activities participants gained skills in canoeing and outdoor cooking.

We chose one of the four elements to show how you could easily devise a thematic study for one day and by the end of the day reflect on the range of subjects possible. By making a journey on water we illustrated and explored how science, art and culture processes is connected to the curriculum. Activities close to water were followed by an indoor session for reflection.

### **Day 3**

Each participant presented his or her own experiences and school. The design and use of school yards and local environments were shown. We visited nearby schools to explore appropriate techniques for outdoor environmental education such as, recycling units, composters, school gardens and schoolyards. Illustration of how schoolyards had been adopted to suit educational activities in different subjects such as mathematics, language, history was shown.

### **Day 4**

By travelling on foot we experienced one of the most common ways of exploring the landscape. On this day we enjoyed the physical sense of walking, climbing and considered the range of possibilities encountered on our journey. Discussion of safe practice and access (e.g. for those with disabilities) formed a theme. The day was aimed to explore the physical possibilities of the outdoor room for movement and play. From the training of senses and with awareness of learning styles based on the somatic body sense, we explored one possible way to develop and strengthen the motivation for learning.

- Hiking day including learning in and through landscapes! (This day includes cooking outdoors, learning about the larder of nature, outdoor safety & health care.)
- In the afternoon you may choose from alternatives:
- Visit to the caves of Trollegater
- The nature around "Hallstad meadows"

### **Day 5**

The knowledge of the hand – how to use different forms of expression was tried. For example there were opportunities to work with wool and make art creations out of what nature had to offer. The cultural historical roots of the landscape was animated by drama and story telling. Literature was studied; prose, poetry and the oral tradition relevant to outdoor education was discussed.

Encountering nature has been the central inspiration and subject for artists and writers all over the world. We explored the aesthetics of out-of-doors and address the integration of "hand-heart-head". The participants were inspired by forms, sound and colours of nature and given the opportunity to show their own work in the form of an exhibition.

## Day 6

One of the challenges of this course from an organisers point of view was to develop an action plan so that when teachers arrived back to their own schools they could begin implementing some of the ideas they had been working with. As participants we felt that the teachers may experience some barriers to implementation so we developed the idea of 'managing change in the workplace'. The activity used to relate ideas on the course to participants' own schools was very innovative.

### Managing Change

A cardboard tree was used as a template to explore this issue. The roots represented peoples' backgrounds, the fruit peoples' thoughts and ideas for the future and the trunk represented the problems people may encounter back home. Participants were given three small pieces of card to write their own thoughts and place one on each of the tree parts. Below are a few examples of what people wrote down:

Ideas and Thoughts – 'Fruit':

- 'use ODE in the playground, local environment, big, wide world'
- 'the soul has to meet the soil for the 'hand, heart and head' way of learning'
- 'I will change my school grounds'
- 'ODE teaches about the local environment'
- 'it is necessary to keep students in contact with nature'
- 'school grounds can have quiet areas for the senses & relaxation; social areas; sports areas and a garden'
- 'it is not difficult to attract teachers to go outdoors if you promote it well'
- 'I will make some raised gardens'
- 'come closer to nature using the senses, songs, games and play'
- 'ODE is the best and only way of teaching soil sciences and plant growing'
- 'when you are in contact with nature, you feel responsibility for yourself, your fellow human beings and all creatures'

Some problems – the 'trunk:

- 'my own laziness'
- 'rain, insects and high temperatures during outdoor lessons'
- 'constraints of existing curriculum'
- 'transport'
- 'convincing colleagues that ODE is worth doing'
- 'no time, no money'
- 'vandalism'

Then, in groups, participants wrote down on their own sheets in more detail what they had put on the tree. We gave them a 'Timetable' (or Critical Path Analysis sheet) on which they were asked to plot their proposed progress over the next 6 months. This was also a requirement for the Final Report to be submitted to the European Union.

A picture of this tree being used can be seen at our website. Also as part of their action plan participants were asked to report back to us after 6 months. For both of these visit our homepage [www.ode.kind.se](http://www.ode.kind.se)

The Swedish course clarified and visualised different educational traditions based on the participants' own experiences. The reviewing process is a central aspect of outdoor education and is used both to reinforce learning and to get the scene for the future. At the end of the course there were practical examples of this, which assisted the participants, and the course organisers, in making their own plans to benefit their communities through their future work.

- Evaluation and review
- How do we go on with this back home?
- Discussions, together with the participants from the same country.
- Working on action plans
- Cultural ending with live folk music and a traditional Swedish crayfish party.

At the end of the course participants were asked to fill in a course evaluation. The results have been collated and are available on the project website.

# Course Curriculum – In-service Training Course

## Outdoor Education-Authentic learning in the context of landscapes

Rimforsa, Sweden May 19 – May 25 2001

The following programme employs and refers back to all aspects of philosophy and theory outlined earlier in this booklet and the previous volume “Outdoor Education – authentic learning in the context of landscapes”. This integration of theory and practice is an essential element of outdoor education.

### Time-table

#### Friday May 18

- Arrivals

#### Saturday May 19

- Introduction
- Presentations – about myself and my country
- Co-operative game – ice-breaker
- Introductory lecture
- Introducing the week’s action plan
- Participative workshops

#### Sunday May 20

Water

- Water as a method of transport (e.g. canoe)
- Different activities using water
- Water in our life
- Developing communication skills

### Curriculum Notes

The introductory lecture will provide an overview of theory and practice.

Focussing on people and places we will explore the means to deliver potential outcomes achievable through outdoor education

We have chosen one of the four elements to show how you could easily devise a thematic study during the day and by the end of the day reflect on the range of subjects we've engaged in.

We will illustrate aspects of science, arts and culture and how this process can satisfy subjects or themes within the curriculum

### **Monday May 21**

#### School Grounds

- We will visit 2 nearby schools
- Working on plans concerning your own school grounds
- Presentation of curriculum ideas for using grounds from N.Europe
- Physical activities

### **Tuesday May 22**

#### How to use the local landscape:

- This day includes cooking outdoors, using the larder of nature
- Outdoor health and safety
- Exploring nature around Hallstad meadows
- Physical problem-solving activities
- Nature and culture of the forest, Tignemåla
- Problem-solving and team building activities, Tignemåla

### **Wednesday May 23**

#### Aesthetic awareness:

- making art creations out of what nature has to offer)
- Story making and story telling
- Exhibition of resources

### **Thursday May 24**

#### Managing change in the work place (workshops):

- What are we going to take back home from the course?
- Discussions (maybe together with the participants from your own country.)
- Working on our action plans
- Cultural ending

The school grounds offer valuable opportunities for teaching outdoors in all aspects of the formal and informal curriculum.

Travel on foot is the most common way of exploring the landscape.

On this day we will consider a range of curriculum possibilities.

Discussion of safe practice and access (e g for those with disabilities).

Encountering nature has been a central inspiration and subject for artists and writers all over the world. Today we explore the aesthetics of out-of-doors and address the integration of "hand-heart-head".

This part of the course will reflect practical examples of managing change, which will assist the participants (and the course organisers) in making their own plans to benefit their communities through their future work.

### **Friday May 25**

- Final evaluation
- Optional visit to Linköping

### **Saturday May 26**

- Departures

The reviewing process is a central aspect of outdoor education and is used both to reinforce learning and to set the scene for the future.

#### **NOTES**

Transport to and from course venues will usually be by mini-bus.

Participants should bring sufficient warm clothing and appropriate footwear for the outdoor sessions (see attached kit list)

Personal flotation devices (PFD's) will be provided where appropriate for water activities

The following audiovisual equipment should be available for shared use by course participants during presentations / workshops: -

35mm slide projector & screen, flipchart & pens, Overhead projector,

#### **Health & Safety**

Anyone taking part in Outdoor Activities must be of a reasonable level of physical fitness for the level of activity and must disclose any personal health condition or allergy which does not allow or could be worsened by strenuous exercise or exposure to cold or wet environments.

#### **INSURANCE**

Appropriately trained and qualified staff leads all courses. However, as with all activities the element of risk cannot be completely eliminated.

Participants must familiarise themselves with the extent and limitations of Insurance Policies

Participants are not insured against personal loss or injury. Should additional personal insurance be required, arrange this in consultation with appropriate agents.

## **Course 2**

### **In-service training course in Scotland (September 2001)**

This course had to be cancelled due to lack of numbers.

The course was to be based in Drymen, some 50 km north east of Glasgow within the proposed boundary of one of Scotland's national parks and close to Loch Lomond. The location is an ideal base from which to undertake the adventurous activity programme, journey to the pre arranged site visits for the school grounds activities.

The area gives easy access to numerous natural environments of contrasting flora, fauna, geographical, geological and historical interest.

The programme of activities was designed to allow individuals to experience aspects of theory and practice outlined in the course handbook as well as creating opportunities for personal development.

**OUTDOOR EDUCATION**  
**- A authentic learning in the context of landscapes -**

DAY	Briefing	Activity am	Transport	Lunch	Activity pm	Evening Programme
Monday 17.09.2001					Arrivals & Settle in	Informal Social Gathering
Tuesday 17.09.2001	Time 0900 Venue	Project introductions Ice Breaker	2 Mini Bus	Set Lunch 1215hrs	Walking the Talk A verbally stimulating activity session (Inchcalloch - Loch Lomond)	Personal briefings. Introductions to each other Tell us something about yourself, your country your outdoor education your work. All course members
Wednesday 19.09.2001	Time 0900 Venue	Aspects of theory into practice A visit to Blairvadach Outdoor Education Centre	2 Mini Bus	Packed	mid afternoon onwards Workshop The Nature of Experiential Learning	Making a Connection D.R.A G an introduction to an urban project in Glasgow
Thursday 20.09.2001	Time 0900 Venue	Outdoor Adventurous Activities Options for participation in a Days activity	2 Mini Bus	Packed	as morning programme	Workshop session Off site Safety Management
Friday 21.09.2001	Time 0900 Venue	School Grounds A visit to two local schools for an overview of how use is made of the school landscape	2 Mini Bus	Packed	School Grounds Discussion groups - using examples and plans of your own school grounds	After Dark (night activity)
Saturday 22.09.2001	Time 0900 Venue	Activity Session	2 Mini Bus	Set 1330	Review & Action Planning	A taste of Scotland Social evening
Sunday 23.09.2001		Departures				

**NOTES**

Transport to and from course venues will usually be by mini-bus. Participants should bring sufficient warm clothing and appropriate footwear for the outdoor sessions (see attached kit list) Personal flotation devices (PFD's) will be provided where appropriate for water activities The following audiovisual equipment should be available for shared use by course participants during presentations / workshops: - 35mm slide projector & screen, flipchart & pens, Overhead projector, Health & Safety Anyone taking part in Outdoor Activities must be of a reasonable level of physical fitness for the level of activity and must disclose any personal health condition or allergy which does not allow or could be worsened by strenuous exercise or exposure to cold or wet environments.

**INSURANCE**

Appropriately trained and qualified staff lead activities. However, as with all activities the element of risk cannot be completely eliminated. Participants must familiarise themselves with the extent and limitations of Insurance Policies Participants are not insured against personal loss or injury. Should additional personal insurance be required, you should arrange this in consultation with appropriate agents.

### **Course 3**

#### **In service training course in Germany (June 2002)**

The course took place in the urban landscape of Berlin. Whereas both courses 1 (Sweden) and 2 (Scotland) were designed for the rural landscape the intention here was to demonstrate that programmes of outdoor education can be run equally well in urban as well as rural settings. One of the key aspects of this course was that it a greenhouse was used as a base in which seminars, lectures and workshops took place. The greenhouse was part of a garden centre called Gartenarbeitsschule which had its own extended garden where outdoor seminars took place. The Gartenarbeitsschule also served as a base from which to visit and use other sites in the city to pursue educational outcomes.

#### **Objectives of the course**

The primary purpose of the seminar was to provide an opportunity for teachers throughout Europe to share and exchange experiences with each other. Through a mixture of workshops, outdoor activities discussions will focus on outdoor education drawing on theoretical aspects and practical experiences.

For this activity the participants were split into groups and asked to consider what outdoor education meant to them.

#### **Day 1**

Co-operative games were used as an active way for participants to get to know each other. Participants were then given a guided tour around the Gartenarbeitsschule (garden work school). After this, course participants talked about themselves and their country. In the afternoon participants worked in small groups to explore the question 'what is outdoor education'? Participants then had the opportunity to feedback in a plenary session. This will be followed by a lecture on the German school garden concept. In the evening participants cooked their own food on an open fire. The final activity was a review of the day. It is interesting to note that all of the activities took place out of doors a point that was noted with great enthusiasm by participants. It demonstrated that the sort of activities normally associated with being indoors (lectures, seminars and workshops) can easily take place out of doors.

#### **Day 2**

The theme of the day was titled 'searching spoors in the city jungle'. Participants visited sites in Berlin where green spaces could be used for studies relating to geography, biology and chemistry. The participants divided into groups of 6 or 7 and were asked to reflect on the activities they had done that day and answer the following questions. They were also tasked to present their findings to the remainder of the group.

- 1 Has anybody any experience working with these ideas at home?
- 2 Say what these ideas are.
- 3 Say how successful you think they were.
- 4 Say why you think they were successful.
- 5 If you have not used these ideas before would you like to in future?

The evening programme was designed to participants thinking about keeping a record of their activities for the week so that a presentation, called the European Congress, could be held at the end of the week. In the evening a music session took place where course participants' played their own instruments.

### **Day 3**

This day was spent visiting one of Berlin's forest schools. Here participants accompanied a school visit and learnt how forest school educators worked with young children. The children were encouraged to take part in role play (impersonating the forest animals) and reflect on their experiences. In the afternoon participants had the opportunity to do the activities themselves and get a feel for what the children were experiencing. The forest school staff provided lunch which was a boar roasted in an outdoor clay oven. The day finished with a review. The review was set up as a debate. Participants were divided into two debate houses with one house defending the motion that outdoor education was an essential part of every child's education and the other house opposing the motion. This provided a useful way of talking about difficult issues such as liability, time constraints, lack of curricular support etc. The debate was also found to be a useful pedagogical technique that teachers would use with their own pupils.

### **Day 4**

The morning activity was a workshop based on the theme managing change. To help teachers focus on implementing the ideas of the course in their own schools they were set the following task. Each group was asked to make a presentation the large group.

'From your own experience review a change which was achieved at your work. The following questions will help you get started':

1. What was the change?
2. Why was the change necessary?
3. Who benefited from the change?
4. What evidence do you have to say that the change worked?
5. Did the change affect you personally in terms of:
  - time
  - effort
  - development of new skills
  - interference with existing priorities.

This was followed by a visit to an urban farm to see how farm animals have been used to encourage young people in a socially disadvantaged area of Berlin to develop a sense of purpose in their lives. The urban farm also has innovative developments such as solar technology used to heat the water in a solar café.

### **Day 5**

This day was given over to the concept of ‘managing change’ looking at ideas that teachers would like to implement in their own school and developing an action plan to achieve this. This was a very important session because it allowed participants the opportunity to discuss both opportunities and barriers for developing outdoor education in their own schools.

There were two presentations from speakers who advised the participants about opportunities for postgraduate study that is available to European teachers in the field of outdoor education.

There was also a final review conducted and the results of the course evaluation are available at [www.ode.kind.se](http://www.ode.kind.se)

Whilst the evaluation may be seen in its entirety at the website here are what some participants had to say about their own working situation and the course they had just completed.

“We had in common that we were not very happy in our working situation knowing that children were missing great opportunities by being inside all of the time. In the case of Tiina there was something missing from the overall view of what she stood for. Seppo thought that his present system was not good for his pupils nor himself. He thought there was no wholistic approach such as the ideas relating to heart, hand and head. Jean felt he could achieve much more of his learning goals by going outside with his pupils. For all it was also a fundamental personal change. We changed the way we thought about pupils and learning and changed our teaching methodologies. We had to study again. But most of all we learned that changes can be made by yourself and you cannot wait for others to make them. As for the pupils we see that they can be better adapted to society and that they can have a better understanding of the environment by having outdoor education. It can be said that they are better aware of the world they live in. This kind of working has an enormous effect on pupils and teachers. The feedback we get on meeting the pupils after many years is very positive and provides motivation to carry on.

The overall feeling of coming on this Comenius course is to know that the ideas we are working with have authority. It is comforting to know that others think this way and that a professional body of people exist throughout Europe’.

**What is Productive Learning?**

One of the themes of the programme was 'Productive Learning'. This is learning on the basis of experiences gained in practice placements chosen by young people themselves. Students become actively involved in real-life social situations. They use skills and knowledge acquired through education to determine, understand and improve their activities. Productive learning is specifically geared to the person, the activity and the culture. It replaces or complements traditional school education or conventional youth training and, in particular offers development on an individual basis.

## Outdoor Education – authentic learning in the context of landscapes Berlin, Germany – 2/6/2002 - 8/6/2002

	Early Morning	Morning	Afternoon	Evening
<b>Sun</b> <b>2/6</b>			Arrivals of participants	20.00: Short Welcome at the Hotelbar (Wine, Beer) Course team (Presentation of the team)
<b>Mon</b> <b>3/6</b>	9.00: <ul style="list-style-type: none"> <li>Meeting at the green house: Introduction into the "Gartenarbeits-schulen-day"</li> </ul>	9.00 - 9.20: <ul style="list-style-type: none"> <li>Co-operative game - ice breaker</li> </ul> 9.20 - 9.40: <ul style="list-style-type: none"> <li>"Walk and Talk" through the Gartenarbeits-schule</li> </ul> 9.40 - 11.20: <ul style="list-style-type: none"> <li>Presentations about myself and my country. First impressions of the participants (How did I feel as I arrived) (5 min. each participant)</li> </ul> 11.20 - 11.25: <ul style="list-style-type: none"> <li>about the Project and Comenius</li> </ul> 11.25 - 11.55: <ul style="list-style-type: none"> <li>Introducing the week's action plan</li> <li>Maybe other games</li> </ul> 11.55 - 12.15: Explaining the Photo-Presentation <sup>1</sup> : dividing in groups (max. 6-7 groups) (What they shall do and what we expect)	12.15 - 13.00: <ul style="list-style-type: none"> <li>lunchtime</li> </ul> 13.00 - 14.10: <ul style="list-style-type: none"> <li>Workshop in Groups (international teams) presentation, (What is Outdoor education in their understanding) Feed Back</li> </ul> 14.10 - 14.30: <ul style="list-style-type: none"> <li>20 minutes input: "What is outdoor education- New ideas</li> </ul> 14.30 - 17.00: <ul style="list-style-type: none"> <li>Introductory lecture of the Schoolgarden Concept</li> <li>Curriculum ideas for using schoolgardens</li> </ul>	18.00 - 20.00: <ul style="list-style-type: none"> <li>Around the fireplace; fish in newspaper, Bananas + Chocolate, Cheese + Ham, apples, potatoes</li> <li>Feed Back = Review on the day and the teachers' (informal) Ideas about their own schools</li> <li>Developing relationships in the group, supporting communication</li> </ul>

<sup>1</sup> Photo-presentation similar to a diary-report. Each group do have a camera (1-2 films a camera (1-2 films a 36 pictures Helmut and Iris will organizes this); Maybe one digital camera-group. Target for each group: Presentation of something personal and important (highlights) of the week. (The films have to be developed on thursday evening before 18.00 Heike).

	Early Morning	Morning	Afternoon	Evening
<b>Tue 4/6</b>	Meeting at the green house: Introduction into the "City-jungle-day"	9.15 Bustrip <sup>2</sup> : <ul style="list-style-type: none"> <li>• "Searching spoors in the city jungle": Out of Doors Green places in the City, possible subjects: Biology, Chemistry, Geography, Languages, Children from 4 - 6 years</li> <li>• problem districts – school-gardens - historical places (Bunker)</li> </ul>	13.00 – 14.00: <ul style="list-style-type: none"> <li>• lunchtime in the artenarbeits schule Tiergarten prepared Eintopf</li> </ul> 14.00 – 14.30: <ul style="list-style-type: none"> <li>• drive to Humboldthain-Schule bei Regen Raum reservieren)</li> </ul> 14.30 – 17.00: <ul style="list-style-type: none"> <li>• Humboldthain-Park<sup>3</sup> und umbold thain-Grundschule; play ground stage, Orientiereering hike - first group gets a prize.</li> <li>• Games</li> <li>• Feed Back</li> </ul>	17.00 – 18.30: <ul style="list-style-type: none"> <li>• Dinner, Hotel</li> </ul> 19.00 – 21.00: <ul style="list-style-type: none"> <li>• European Congress in the Greenhouse: Exhibition "My school" (Szenario, Galerie) and Slides from pupils "This is my Berlin" (incl. instruments). OH-Projector, 4 Flipcharts and paper</li> </ul>
<b>Wed 5/6</b>		9.30 S-Bahn Wannsee <ul style="list-style-type: none"> <li>• "Forest-school" Zehlendorf: The adventures way to learn. Action activities, working with disfavoured pupils, observing animals, experience learning, developing senses, sportive games, dynamic walks, how to use the environment for exercises.</li> <li>• Curriculum ideas for using forest (mathematics, language examples)</li> </ul>	12.00 – 14.00: Barbecue (Wild boar, potatoes, Quark, vegetables 14.00 - 17.00 <ul style="list-style-type: none"> <li>• Physical activities in the forest<sup>4</sup></li> </ul> Small practical workshops, challenges; ropes, simples obstacles, how to use trees) <ul style="list-style-type: none"> <li>• Feed back (30 Min.)</li> </ul>	Feel free for your own arrangements

<sup>2</sup>different places for a thematical trip: "green in the City"; "trees in the City" Problem-District Wedding: Playground; "Allotment Gardens", and a "Ecological Allotment"; Playground on the road and second Gartenarbeitschule (Tiergarten-District); "Schoolgarten" (Lessing-Gymnasium, Humboldthain Grundschule; "beck landscape in the City" (Panke-Grünzug, Adventureplayground, rainwater-system, roots clarifier - Wollankstraße); "Parks" (Tiergarten, Reichstag, Kanzleramt).

<sup>3</sup>Jan will receive from Helmut a map from the Humboldthain-Park.

<sup>4</sup>Jan will receive a topographical map (1:10.000) from Carsten

Early Morning	Morning	Afternoon	Evening
<p><b>Thu 6/6</b></p> <p>Meeting at the green house: Introduction</p>	<p>9.00 - 10.30</p> <ul style="list-style-type: none"> <li>Working on our action plan / Managing Changes ?</li> <li>“20 minutes input” Theory and Managers change (after dinner, in the Gartenarbeitsschule) Feed Back: Review of the day“</li> </ul> <p>10.30 - 13.00</p> <ul style="list-style-type: none"> <li>productive learning” at Berlin schools, concept for disfavoured pupils (in the Gartenarbeitsschule)</li> </ul>	<p>13.00 – 14:00</p> <ul style="list-style-type: none"> <li>lunchtime (Kebab)</li> </ul> <p>14.00 - 14.45 U-Bahn till Kreuzberg</p> <ul style="list-style-type: none"> <li>Farming project for children and a Solar Café - Outdoor education in urban district</li> </ul> <p>14.45 - 15.15</p> <ul style="list-style-type: none"> <li>Introduction to the farming project</li> </ul> <p>15.15 - 15.45</p> <ul style="list-style-type: none"> <li>Coffe and tee from the sun; looking around</li> </ul> <p>15.45 - 16.30</p> <ul style="list-style-type: none"> <li>Explaining solar energie and foun tain (technical aspects)</li> </ul> <p>16.30 - 17.00</p> <ul style="list-style-type: none"> <li>Experiences with solar boats on the pond or looking to the ani-mals<sup>5</sup></li> </ul> <p>17.00 - 18.00</p> <p>Reflection and Feed Back</p>	<p>19.00: (Volontary)</p> <p>Cultural ending: German evening at the Technical University</p>

<sup>5</sup>All films will be given to Heike before 18.00 h for developing!:

	Early Morning	Morning	Afternoon	Evening
<b>Fri 7/6</b>	Meeting at the green house: Atmosphere for the day	9.0 - 10.30 <ul style="list-style-type: none"> <li>Guidance for Managing change at the work place - What are we going to take back home from the course?</li> </ul> Action plan and time table (say "one idea" - Protokoll this for the final report - further contacts, follow up, networking together, mailing list 10.30 - 13.30 <ul style="list-style-type: none"> <li>Final evaluation: photo-presentation for final reflection and evaluation</li> <li>Working group activity, framing and preparing the presentation.</li> </ul>	12.30 - 13.30 <ul style="list-style-type: none"> <li>Lunch (Catering)</li> <li>13.30 - 14.30</li> <li>finishing working group activities</li> <li>14.30 - 15.00</li> <li>Theory</li> <li>15.00 - 17.00</li> <li>Presentation<sup>6</sup> (Plenary)</li> </ul>	European evening and Team, each participant will bring some cultural equipment from his country.
<b>Sat 8/6 or Sun 9/6</b>		Departures		

<sup>6</sup>The plenary will choose from each group the best photos or slides for the final. report. We will record the slides-presentation with a videorecorder. One Video and slide-copies for each participant.

**Please note:**  
Project-team meeting each day after dinner for 10 minutes

# How teachers in Europe Think About Outdoor Education

*Clemens Seyfried/ Marianne Neißl*

## 1. Abstract

During a study within the framework of the Comenius Project “outdoor education – authentic learning in the context of landscapes”, 179 teachers were questioned about the project. The aim was to evaluate the opinions and attitudes of teachers who will tend to have a practical perspective on outdoor education. The results could be used for the development of in-service training and further activities on the topic of outdoor education.

## 1. Question Formulation

Following aspects have been investigated:

- Do these activities support the cognitive and social learning process of participating pupils?
- Are there reservations towards Outdoor Education (organisational difficulties, risk of accidents)?
- Is special knowledge necessary for Outdoor Education?
- Do teachers consider activities of Outdoor Education attractive for their individual development?
- Is Outdoor Education being considered a beneficial measure for pupils with special needs?

The central task was the descriptive analysis of the data obtained. Concerning the problem of significant differences, following criteria were used as independent variables:

- Experiences with pupils with special needs
- Experiences with Outdoor Education
- Age groups of the pupils being educated
- Partner countries

In total 179 questionnaires from Austria, Czech Republic, Germany, Sweden and United Kingdom had been available for the evaluation. Concerning the analysis of significant differences, one has to take into consideration that the size of the sample surveys varies to a great extent. Hence, significant differences have to be seen in relative terms. Nevertheless as a starting point for further work on the topic these differences seem to be useful.

## 2. Questionnaire

### OUTDOOR EDUCATION

The Socrates Comenius 2.1 project "OUTDOOR EDUCATION - AUTHENTIC LEARNING IN THE CONTEXT OF LANDSCAPES" is concerned with learning activities outside the school building. The main aim of Outdoor Education is to incorporate the school surroundings, nature and the urban environment into everyday school life. Activities within the framework of Outdoor Education range from working in the school garden to "climbing weeks", from nature excursions to walks around a particular area of town. The questionnaire below is also part of our project. We are interested in finding out what you think of Outdoor Education.

Thank you for taking the time to fill in the questionnaire.

I teach children with special needs	<input type="radio"/> Yes	<input type="radio"/> No
I already have experience of outdoor education	<input type="radio"/> Yes	<input type="radio"/> No

I teach children aged	<input type="radio"/> 6 to 10/11
I teach children aged	<input type="radio"/> 12 to 15/16
I teach children aged	<input type="radio"/> 17 and above

We are interested in your personal opinion on the following statements. Please circle a number according to the extent to which you agree or disagree with the statements.

Use the following scale:

5 = totally agree

4 = partly agree

3 = neutral

2 = partly disagree

1 = totally disagree

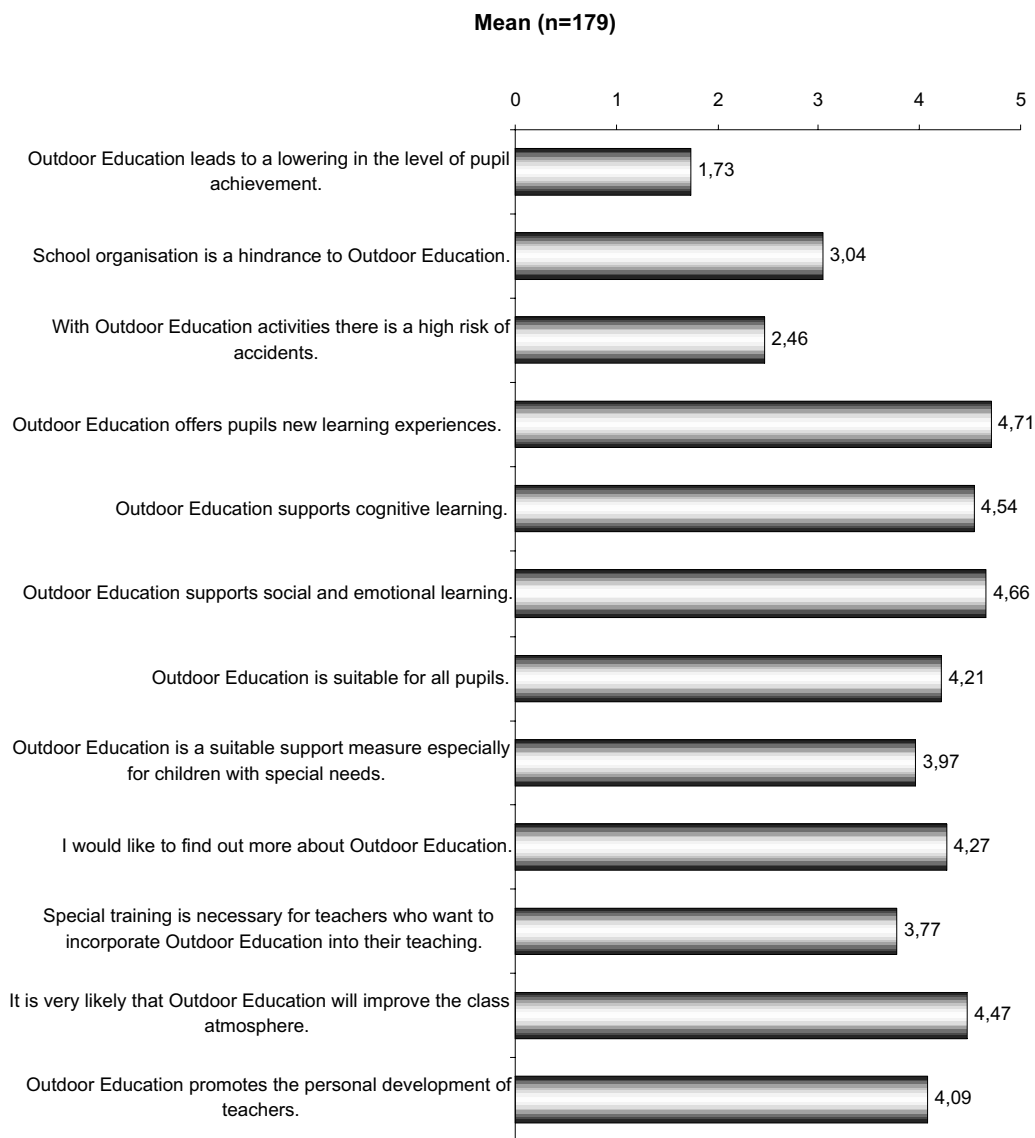
*(Questionnaire continues on next page)*

01 Outdoor Education leads to a lowering in the level of pupil achievement.	5	4	3	2	1
02 School organisation is a hindrance to Outdoor Education.	5	4	3	2	1
03 With Outdoor Education activities there is a high risk of accidents.	5	4	3	2	1
04 Outdoor Education offers pupils new learning experiences.	5	4	3	2	1
05 Outdoor Education supports cognitive learning.	5	4	3	2	1
06 Outdoor Education supports social and emotional learning.	5	4	3	2	1
07 Outdoor Education is suitable for all pupils.	5	4	3	2	1
08 Outdoor Education is a suitable support measure especially for children with special needs.	5	4	3	2	1
09 I would like to find out more about Outdoor Education.	5	4	3	2	1
10 Special training is necessary for teachers who want to incorporate Outdoor Education into their teaching.	5	4	3	2	1
11 It is very likely that Outdoor Education will improve the class atmosphere.	5	4	3	2	1
12 Outdoor Education promotes the personal development of teachers.	5	4	3	2	1

### 3. Results

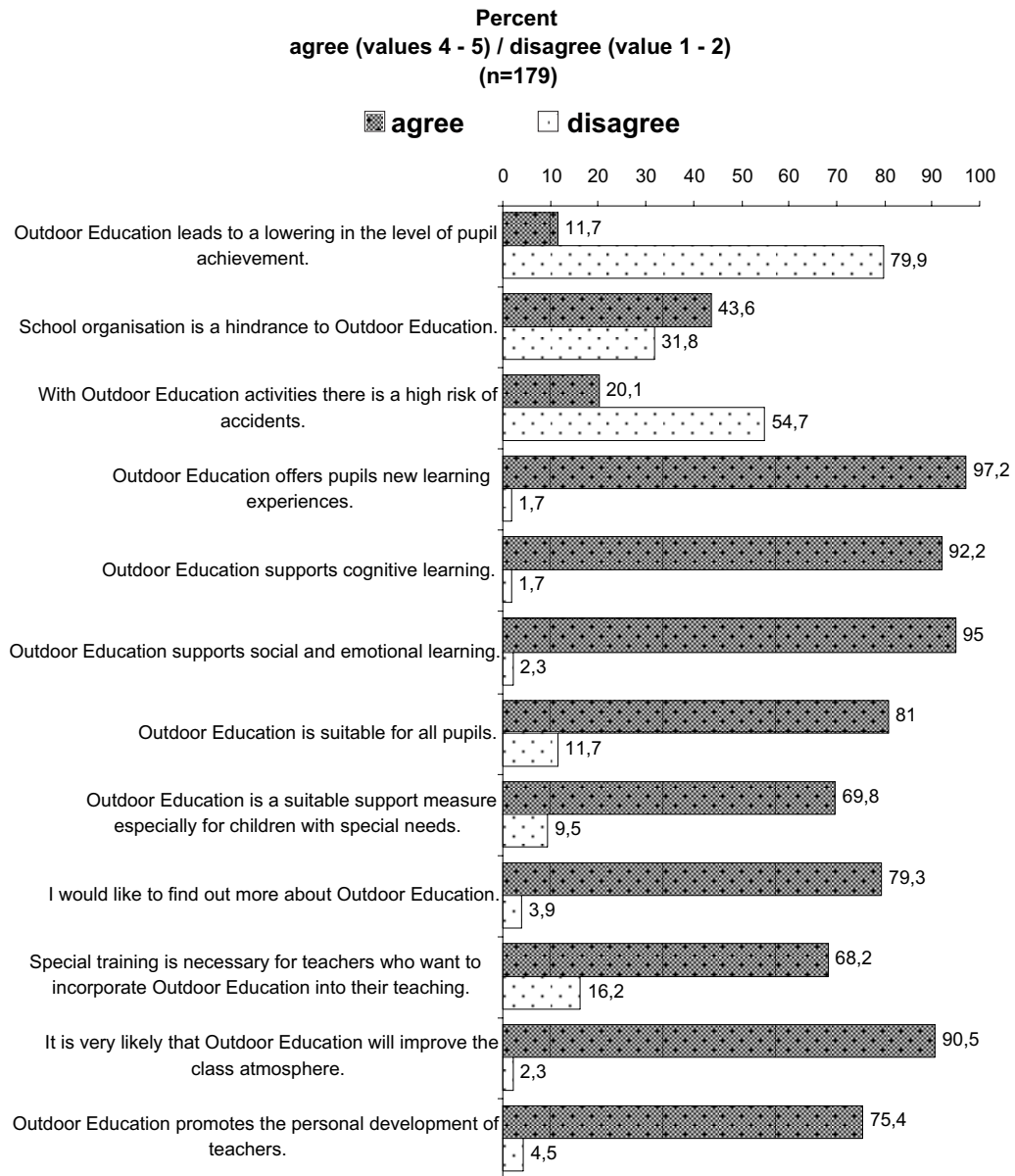
#### 3.1. Overall results

The graphic on the next page presents the mean values of the 179 evaluated questionnaires.



Noticeable is the massive tendency of agreement (values above 3) for the items. The only exceptions are those items, which formulate a negative attitude towards Outdoor Education. The questioned teachers do not agree with the items “Outdoor Education leads to a lowering in the level of pupil achievement” and “With Outdoor Education activities there is a high risk of accidents”. Concerning the question of organisational difficulties in the realisation of Outdoor Education, “School organisation is a hindrance to Outdoor Education” the questioned persons took up a neutral position. The aspects of new learning experiences and support of the social and emotional learning through Outdoor Education were considered especially positive. The results for the items “Outdoor Education is a suitable support measure especially for children with special needs” and “It is very likely that Outdoor Education will improve the class atmosphere” express positive agreement in every respect.

**How teachers in Europe think about outdoor education**  
**Relative (%) agreement and disagreement with the questionnaire statements (n=179)**



These results demonstrate the positive attitude of the teachers towards Outdoor Education and indicate the demand for further information and training opportunities. Of the interviewees 79,9 % do not believe that Outdoor Education leads to a lowering in the level of pupil achievement. Concerning the question of organizational difficulties the answers are distributed as 31,8% who do not consider school organisation as a hindrance, whereas 43,6% do believe this, whilst 24,6% take up a neutral position towards this question. A modest percentage (20,1%) perceive there to be a high risk with Outdoor activities. In the ranking of agreement the item "Outdoor Education offers pupils new learning experiences" occupies the first rank with 97,2%, followed by "Outdoor Education supports social and emotional learning" with 95% and "Outdoor Education supports cognitive learning" with 92,2%. Furthermore 90,5% of the persons asked consider that Outdoor Education influences the class atmosphere in a positive way. The items concerning the target group do also meet with agreement. 81% share the opinion that Outdoor Education is an activity for all pupils, 69,8% regard Outdoor Education especially suitable for children with special needs. With regard to the personal qualifications of teachers 79,3% indicate that they want more information about the topic, 68,2% think that a special training is necessary in order to be able to carry out Outdoor Education and 75,4% agree with the proposition "Outdoor education promotes the personal development of teachers".

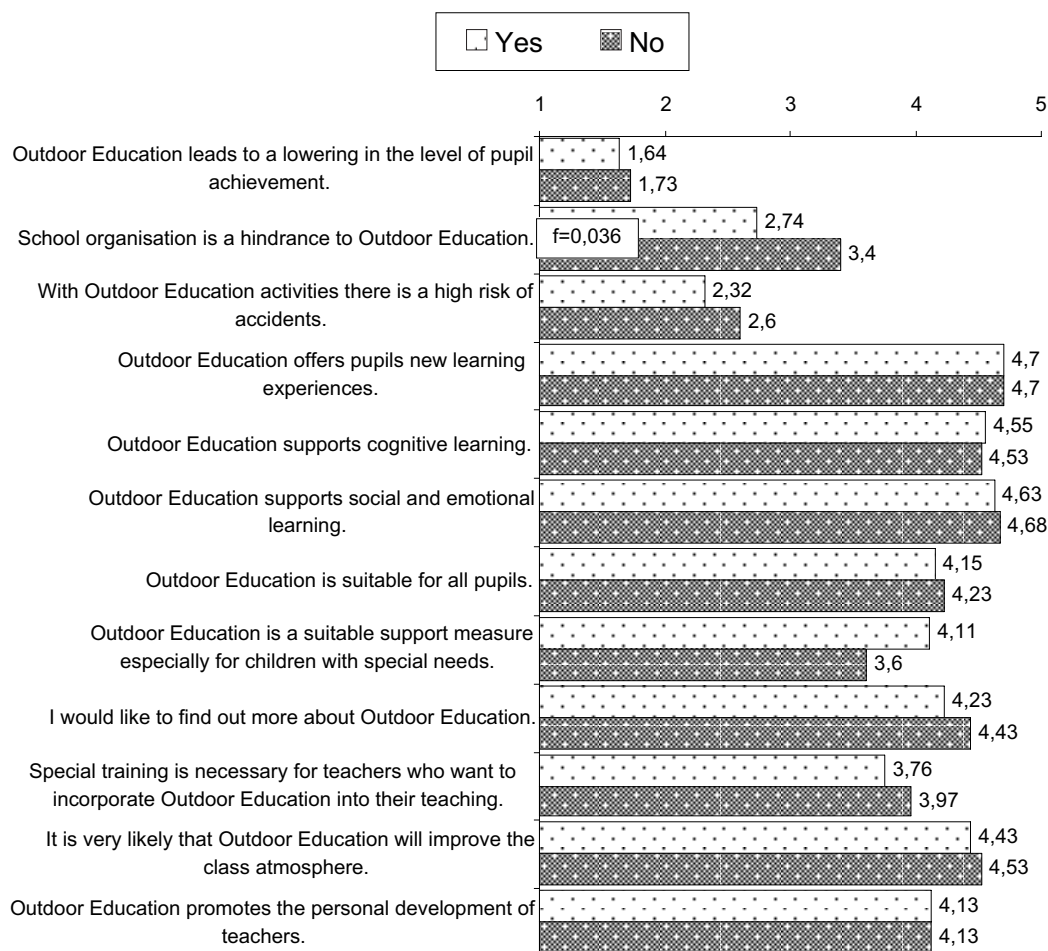
### **3.2. Differences with the groups asked**

#### **3.2.1. Work with children with special needs**

In terms of analysis of the responses of those who work with children with special needs and those who do not, no significant differences were observed to a number of the statements. Within both groups the fields "New learning experiences for pupils", "Cognitive learning", "Promotion of social and emotional learning", "improve the class atmosphere" and the request for further information about outdoor education obtain high agreement.

At a t-test (independent samples) with the item "School organisation is a hindrance to Outdoor Education" significant differences can be observed. Teachers with experience in the field of working with children with special needs do not see a big hindrance in the school organisation. A possible explanation might be that these groups of teachers have had experience with organisation.

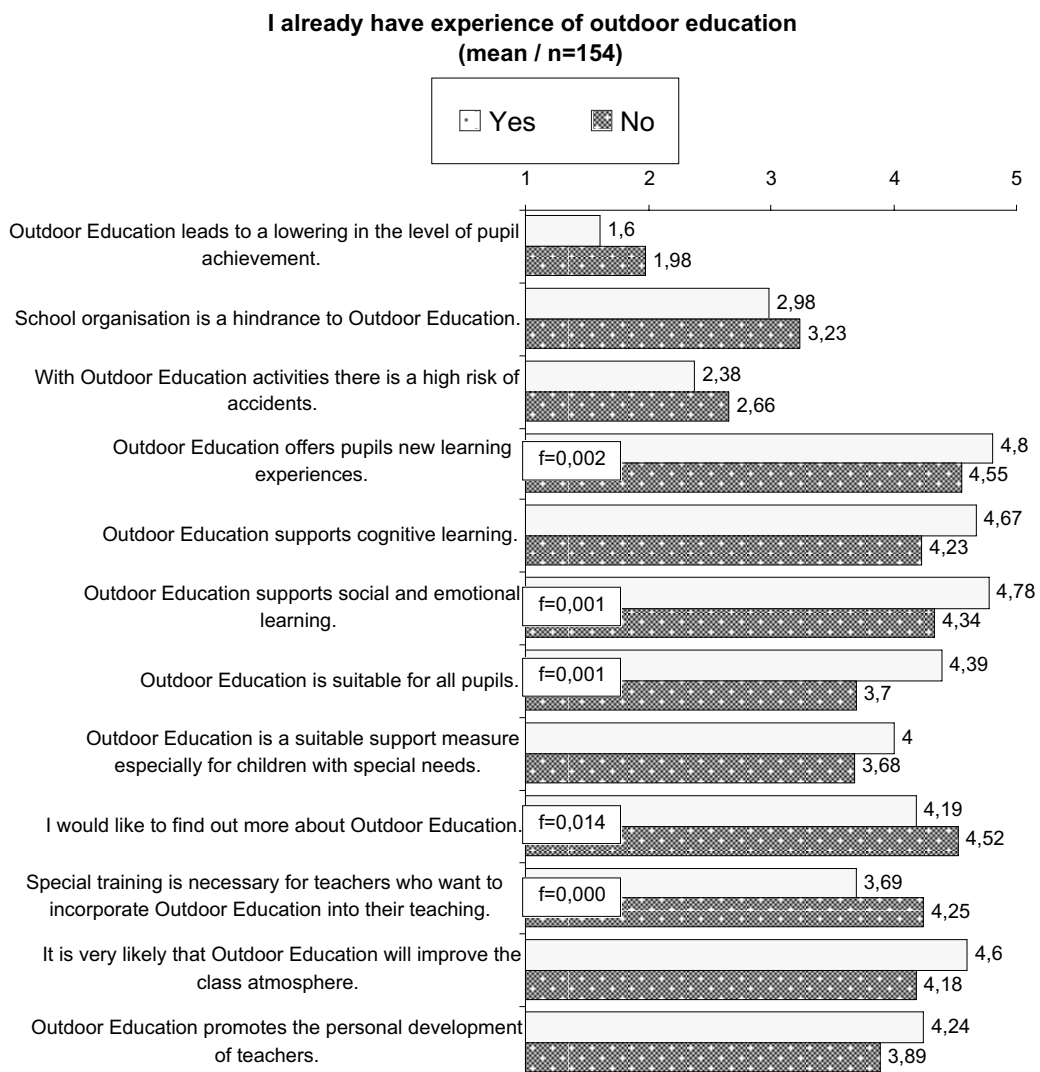
**I teach children with special needs**  
(mean / n=164)



### 3.2.2 Experience with Outdoor Education

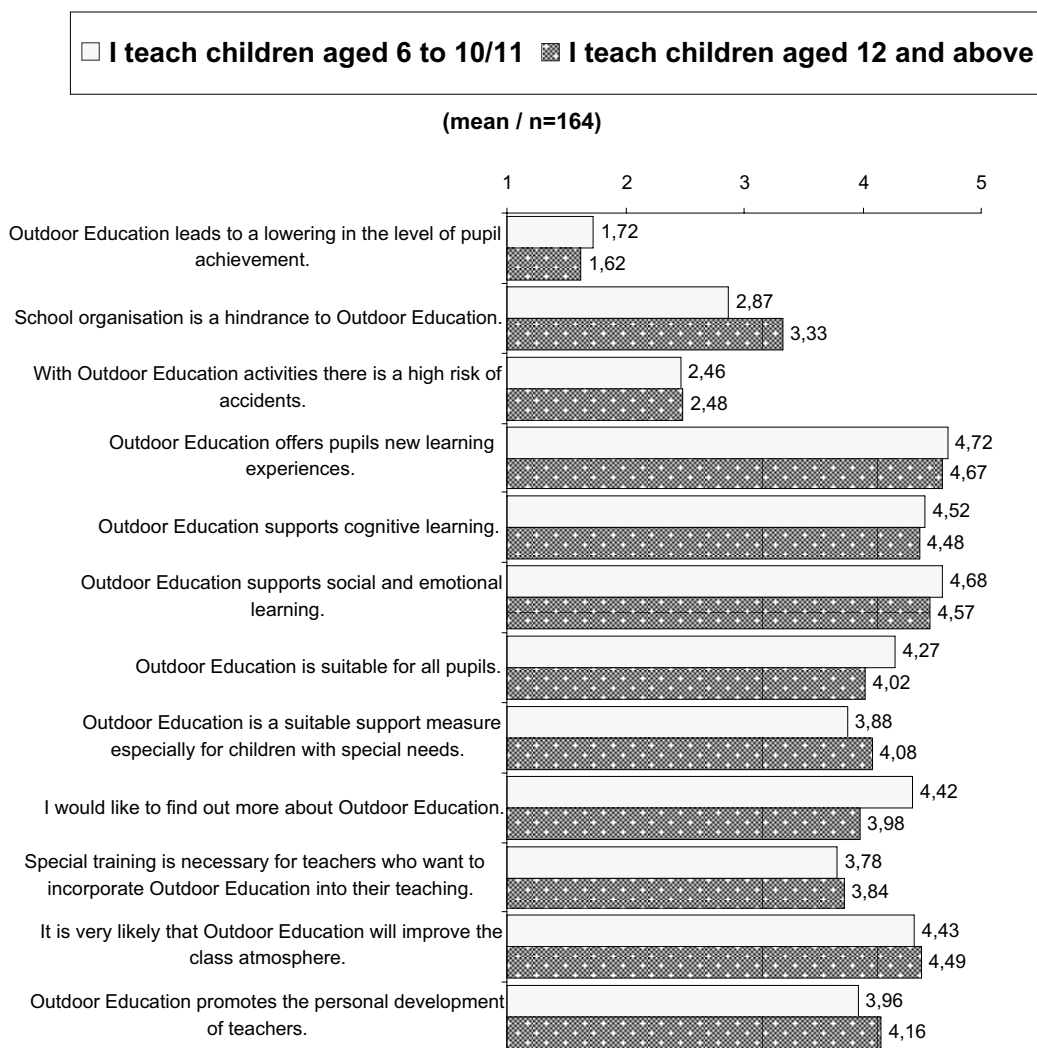
The starting point is the question whether teachers with experience in the field of Outdoor Education do distinguish themselves significantly to teachers without experience in this field (t-test independent samples). With regard to the items “Outdoor Education offers pupils new learning experiences” and “Outdoor Education supports social and emotional learning” both groups agree in a positive way; however persons with experience significantly to a higher extend. With the item “Outdoor Education is suitable for all pupils” those persons who have had experiences with Outdoor Education show a significantly higher level of agreement than those persons without experience. The item “I would like to find out more about Outdoor Education” is being

regarded as significantly more important by teachers with no experience in the field of Outdoor education. The necessity for a special training for Outdoor Education, (“Special training is necessary for teachers who want to incorporate Outdoor Education into their teaching”), is regarded as significantly more necessary than within the comparative group. The effect that competences acquired in daily work are not regarded as newly learned, can be interpreted as a possible reason.



### 3.2.3. Age groups of the pupils being educated

In the evaluation the three categories of the questionnaire have been reduced to two. The category of pupils aged older than 17 was combined with the age group of pupils older than 12. The reason was the too small sample survey for the last category (6 persons). Obviously the age group of the pupils being educated does not play a decisive role in the assessment of the statements.



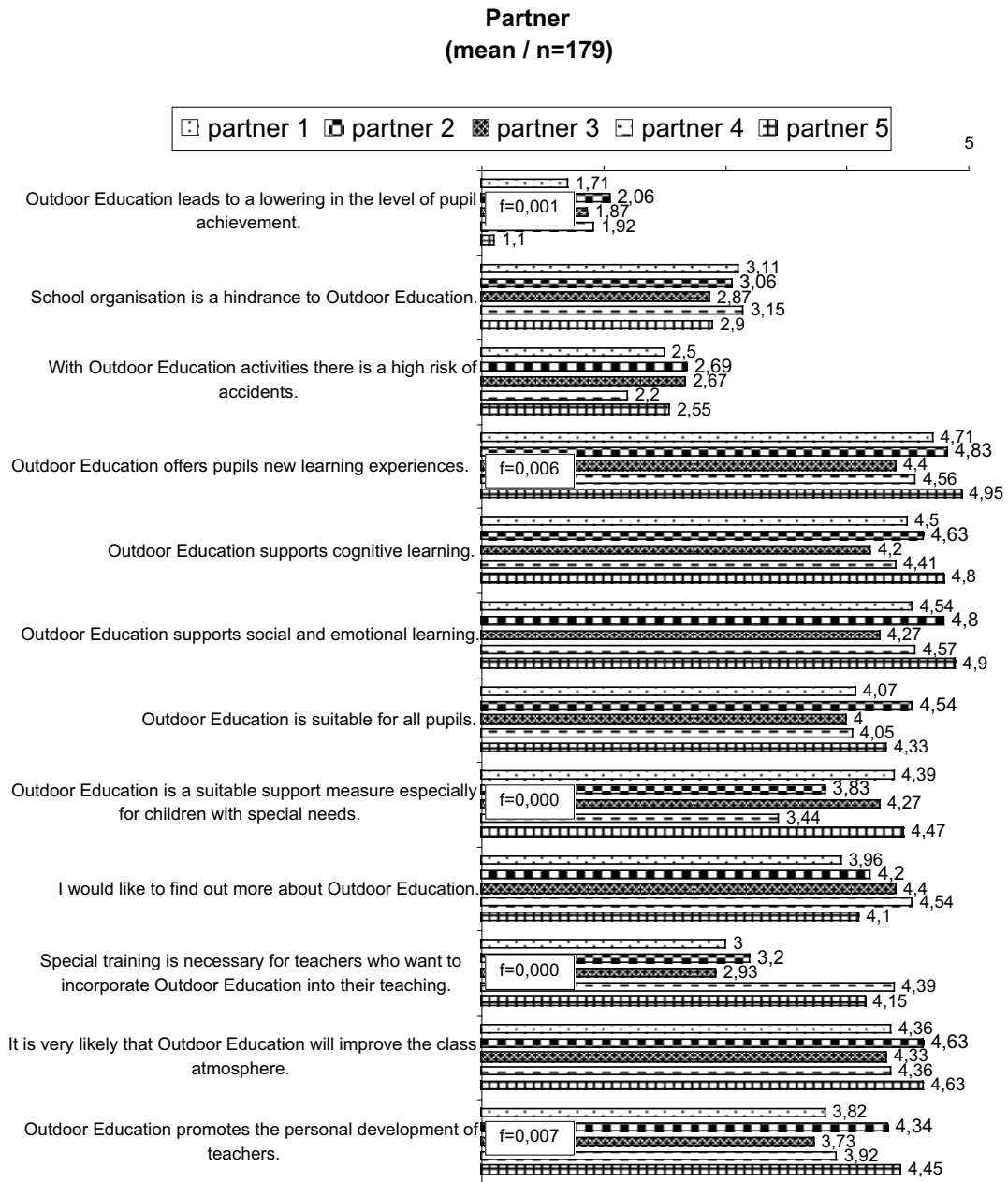
### **3.2.4. Differences with persons asked between the partner countries**

With the items “Outdoor Education leads to a lowering in the level of pupil achievement” and “Outdoor Education offers pupils new learning experiences” significant differences can be observed. The project partners participating in the survey show a large degree of similar tendencies with the evaluation of the different items. With the help of the Variance of Analysis (ANOVA) five partially highly significant differences can be observed.

With the item “Outdoor Education is a suitable support measure especially for children with special needs” partner 1 (Austria), partner 3 (Germany) and partner 5 (United Kingdom) agree remarkably to a higher extent than the other two partners. Significant differences can also be observed with the item about the necessity for a special training. Whereas the partners 1 to 3 (Austria, the Czech Republic and Germany) are more or less coincident in their evaluation, this item (“Special training is necessary for teachers who want to incorporate Outdoor Education into their teaching”) is being evaluated with far greater positive agreement by partner 4 (Sweden) and 5 (United Kingdom). With the item “Outdoor Education promotes the personal development of teachers” partner 2 (Czech Republic) and partner 5 (United Kingdom) agree to a higher extent than the other three partners.

This result has to be handled with care due to the problem with sample surveys (unequal distribution of sample surveys in the partner countries). But these significant differences can be used as helpful advice for further studies. Furthermore do the results build a possible basis for the further co-operation between the partner countries. The common tendencies as well as the differences in the evaluation of the items from teachers in the different countries show the necessity for further discussion and development of Outdoor Education as an educational concept.

#### 4. Summary



The aim of the survey was to obtain different attitudes and assessments from teachers in Europe on the topic of Outdoor Education. While the analysis of the evaluated differences between the groups can lay the basis for special programmes in the conception of in-service courses, the descriptive results of commentaries by teachers about Outdoor Education can be summarised as follows.

Teachers have a very positive attitude towards Outdoor Education and consider these activities as adequate in order to

- realise new learning experiences for pupils
- promote cognitive, social and emotional learning
- develop a positive class atmosphere

Furthermore do the teachers consider Outdoor Education as an appropriate conception

- for children with and without special needs
- for the development of the own personality

No agreement by the persons asked in the five participating partner countries received the fields of a high risk of accidents and the dangers of lowering the pupil achievements. Hindrances in the realisation of Outdoor Education through the school organisation have been widely classified as neutral by the persons asked.

We hope that the results of the study are helpful for a pedagogically adequate further development of Outdoor Education and herewith represent a contribution to the improvement of quality of educational processes.

**PART 3**  
**APPENDICES**

## PROJECT PARTNERS

### AUSTRIA

Pädagogischen Akademie der Diözese Linz  
Salesianumweg 3  
A-4020 Linz, Austria  
Phone: +43 (0) 732 772 666  
Fax: +43 (0) 732 79 73 06  
Marianne Neissl nem@padl.ac.at  
Clemens Seyfried sec@padl.ac.at

### THE CZECH REPUBLIC

Palacky University  
Faculty of Physical Culture, Department of Recreology  
Na Siheniku 44  
779 00 Olomouc, Czech Republic  
Phone: + 420 68 54 14 315  
Jiri Kratochvil krata@ftknw.upol.cz

Charles University,  
Faculty of Physical Education and Sport,  
Dep of Outdoor Sports Education  
Josef Martího 31, 162 52 PRAHA 6, Czech Republic  
Phone: +420 2 2017 2094  
Fax + 420 2 2056 1621  
Dusan Bartunek bartunek@ftvs.cuni.cz  
Jan Neuman neuman@ftvs.cuni.cz

### GERMANY

Technische Universität Berlin  
ZEK-WB  
Steinplatz 1  
D-10623 Berlin, Germany  
Phone: +49 (0) 30 314 212 96  
Fax: +49 (0) 30 314 242 76  
Iris Löhrmann wb@zek.tu-berlin.de  
Heike Laschinski heike.laschinski@gmx.de

Sekretariat FR 4-8  
Franklinstrasse 28/29  
D-10587 Berlin, Germany  
Phone: +49 (0) 30 314 242 10  
Fax: +49 (0) 30 873 13 03  
Rainer Morsch mors0232@mailszrz.zrz.tu-berlin.de

Gartenarbeitsschule Wedding  
Scharnweberstrasse 159  
D-134 05 Berlin, Germany  
Phone: +49 (0) 30 498 704 09  
Fax: +49 (0) 30 498 704 11  
Helmut Krüger-Danielson hkd@aol.com

## **SWEDEN**

Kinda kommun  
Lärcentrum  
Storgatan 38  
S-590 40 Kisa, Sweden  
Phone: +46 (0) 494 194 25  
Phone: +46 (0) 494 190 00  
Fax: +46 (0) 494 194 30  
Margit Hensler margrit.hensler@kinda.se

Bäckskolan  
Plantgatan 12  
S-590 40 Kisa, Sweden  
Phone: +46 (0) 494 192 52  
Fax: +46 (0) 494 192 51  
Britt-Marie Andersson britt-marie.andersson@kinda.se

Linköpings University  
Center for Environmental Education ( CMU )  
S-581 83 Linköping, Sweden  
Phone: +46 (0) 13 28 19 96  
Fax: +46 (0) 13 28 19  
Anders Szczepanski andsz@esi.liu.se

Linköpings Kommun  
Rystad Skola  
Frisbov. 1  
S-585 91 Linköping, Sweden  
Phone: +46 (0) 13 39 73 34  
Fax: +46 (0) 13 39 71 46  
Birgit Jönsson birgit.jonsson@tallboda.linkoping.se

## **UNITED KINGDOM**

National Association of Environmental Education  
44 Maney Hill Road, Sutton Coldfield  
West Midlands, England B72 1JR  
Phone: +44 (0) 121 354 8438  
Fax: +44 (0) 121 354 8438  
Sue Fenoughty suefen@enviro.fsnet.co.uk

Blairvadach Outdoor Education Centre  
Rhu, Helensburgh G84 8NN, Scotland  
Phone: +44 (0) 14 36 82 04 91  
Fax: +44 (0) 14 36 82 06 68  
Dave Fowler [blairvadach.principal@rmplc.co.uk](mailto:blairvadach.principal@rmplc.co.uk)

University of Edinburgh  
Outdoor Education Section  
Faculty of Education  
St Leonard's Land,  
Holyrood Road  
Edinburgh  
EH8 8AQ Scotland  
Department Phone; +44 (0) 131 651 65 20  
Fax: +44 (0) 131 651 6521  
Peter Higgins [pete.higgins@ed.ac.uk](mailto:pete.higgins@ed.ac.uk)  
Robbie Nicol [robbie.nicol@ed.ac.uk](mailto:robbie.nicol@ed.ac.uk)

# **Presentations on Outdoor Education at DG Environment, Brussels**

## **Introduction**

Partly as a result of work on this project Anders Szczepanski and Peter Higgins were invited to make presentations at the European Parliament 'Green Week' in April 2002. Both were asked to do so on behalf of the Swedish delegation to the Parliament at this extensive, week long conference which brought together individuals from all over Europe who work in environmental issues. Much of the initiative for involvement was the result of work by Kerstin Strand. Practical aspects were demonstrated by Britta Brügge and Dusan Bartunek by involving delegates in a range of outdoor learning activities a local park in Brussels. The two presentations made by Anders Szczepanski and Peter Higgins contained some of the material already presented in PART 1 of this book and so the Abstracts only are provided below.

### **Outdoor Education – A hands-on approach**

*Britte Brygge and Dusan Bartunek*

This practical workshop will let participants work outdoors and will show them different ways of seeking and acquiring knowledge. It will, among other things show how we can connect with traditional knowledge through creativity, imagination and movement.

### **Learning Outdoors: Taking Responsibility for Health, Citizenship and Sustainability (Abstract)**

*Peter Higgins*

This presentation adopts 'taking responsibility' as a unifying theme and outcome of education. It proposes that by engaging in the process of taking decisions young people learn both the importance of taking responsibilities and gain practice valuable in later life. Whilst this can be achieved in a classroom setting, it is proposed that the more consequential circumstances found outside the school can provide excellent learning opportunities for this generic theme.

Each of the key themes is explored whilst retaining a focus on the inherent complexity in each and also their inter-relatedness. The notion of complexity is of central importance as most sustainability issues are themselves complex and hence there is limited value in addressing them through simple 'linear' thought.

The nature and limitations of subject based learning in schools is considered, and the argument promoted that rather than a primary focus on the 'Three Rs' (Reading,

‘Writing’ and ‘Arithmetic’) a broader concept of education based on the ‘Three Hs’ (Heart, Hand and Head) is required. This is in line with modern learning theory relating to both holistic learning and ‘multiple intelligences’.

The outdoors is seen as the location, the stimulus and the subject matter for such learning. The means of delivery is primarily experiential with outdoor educators selecting tasks of increasing depth and difficulty and require teachers to devolve greater levels of responsibility to students. Further, the theme of adventure in learning is explored and the argument made that such an approach encourages a broad ‘problem solving’ approach.

Outdoor education has a long tradition of physical activity as a means of travelling on land and water. This form of activity is less physically stressful than many of the traditional team-sports young-people experience in schools and are also often those in which a lifelong interest is maintained. For example walking in the countryside is both the most popular adult physical recreation, and that most suitable to continue into later life. Such activities also have social benefits and the focus is frequently on co-operation rather than overt competition.

One of the longstanding claims made for outdoor education is that carefully selected experiences can encourage participants to become aware of their own strengths and weaknesses and those of others. Through these experiences personal and social development takes place, having direct benefits in active citizenship.

Direct experience of the natural world and its physical and biological processes is central to understanding our dependence on it and the effects of human exploitation of natural resources. Only by becoming aware of these often hidden and inadvertent effects, and of both the fragility and robustness of Earth and life processes, will active citizenship involve adoption of sustainable living. Above all it is vital to educate young-people to become aware of their connection to such processes and that there are always consequences to their actions. In summary, there is an urgent need for all of us to take responsibility for health, others and sustainability and this must become a central theme of contemporary education.

## **Outdoor environmental education – with focus on environmental health and learning in and through the context of urban and rural landscape out-of-doors: Exploring the place of experience and learning for sustainable living (Abstract)**

*Anders Szczepanski*

This paper describes outdoor education as a thematic and interdisciplinary field of education in the natural and cultural landscape arena. Through thematic studies and

activities in the landscape, outdoor environmental education tries to animate the often abstract concepts of the disciplines, and thereby create a local, ecological, historic, physical and social sense of place among children, students and teachers (Dahlgren, L.O & Szczepanski, A. 1997). Practical knowledge is mastered through authentic activities in authentic contexts. An extended pedagogical activity in the outdoor space results in a more vivacious educational perspective, in concrete environmental work departing from direct experiences that will give the children, students and teaching staff unique knowledge. The concept of outdoor environmental education acknowledges the importance of selecting an appropriate place for education as well as a technique or means of learning. In this setting students learn directly about the relationship of knowledge to the physical reality of the place. This is achieved through biochemical, social, and cultural dimensions whereby that which is known has a past, present and future. Through these means students learn about the key importance of relationships and respect for the learning and teaching process. This process begins with personal experience "the soul in the soil" perspective and leads to deep questioning in the context of landscape. This is of great importance and acts as a norm supporting the structure and base of environmental knowledge, and learning about recycling, water, air and soil with children and youth. Contemporary ideas of sustainable development in different human fields of activity presuppose a deep and elaborate awareness of the conditions for man's interaction with the environment. Therefore we want to show ways to increase activities that visualise and clarify our relations with the landscape. Recent studies point to evidence that more movable learning environments and daily physical activity promoting health and preventing disease as diabetes, obesity, bone-weakness, and stress syndrome caused by high levels of stress hormones because the impact of the learning environment. There are some implications that pedagogy and health connected to the learning environment out-of-doors have an effect on environmental health.

This presentation is a reflection on learning in action, about my experiences from the "extended classroom" in the context of teacher training university courses and how practical environmental learning, in the out-of -doors is an important motivation factor and starting point in cyclic thinking, responsibility for health and sustainability

The didactic situation, the 'where, what, how and why' portrays learning as a part of the landscaping process. Thus outdoor environmental education courses try to shift the perspective towards pedagogical diversity, sustainable learning through the landscaping process. Thus, landscape is defined by the surroundings of the body - what the individual sees, smells, hears, feels, tastes and senses in the meeting with her/his environment. Humans are in the world by means of their throbbing, acting learning bodies. The mobile, sensing and creative relationship between humans and landscapes is called landscaping. Often an underestimated and hidden part of the learning process in teacher training courses about environmental education. We need to see the new generation as messengers and not victims in, about and for the environment.

# BIBLIOGRAPHY

## In English

Adams, E. (1990) *Learning through Landscapes*; a report on the use, design, management & development of school grounds.

Barrett, J. and Greenaway, R. (1995) *Why Adventure ? The Role and Value of Outdoor Adventure in Young People's Personal and Social Development*. Coventry: Foundation for Outdoor Adventure,.

Billimore, B., Brooke, J., Booth, R., and Funnell, K. (1990) *The Outdoor Classroom*, Building Bulletin 71. Dept. of Education and Science. HMSO.

Björklid, P. (1982) *Children's outdoor environment - A study of children 's outdoor activities on two housing estates from the perspective of environmental and developmental psychology*. Stockholm University (Doctoral dissertation).

Blatchford, P. and Sharp, S. (1994) 'Breaktime and the School: *Understanding & Changing Playground Behaviour*'. Routledge.

British heart foundation (2000) Report '*Couch Kids – the Growing Epidemic*'

Brooke, J. et al (1997) '*School Grounds: A Guide to Good Practice*' Building Bulletin 85.

Cooper, G. (1991) *The Role of Outdoor and Field Studies Centres in Educating for the Environment* JAEOL 8:2, 10-11,.

Cooper, G. (1994) *The Role of Outdoor Education in Education for the 21st Century*. JAEOL 11:2, 9-12,.

Cooper, Geoff, (1998) *Outdoors with Young People - A leader's guide to outdoor activities, the environment & sustainability*, Russel House Publication.

Dahlgren, L., O. and Szczepanski, A. (1998.) *Outdoor Education. Literary education and sensory experience*. Linköping: Kinda Education Center.

Department of education and science (DES) (Elton Report) (1989) *Discipline in Schools*, Report of the Committee of Enquiry chaired by Lord Elton, London. HMSO

Drasdo, H. (1973) *Education and the Mountain Centres*. Llanrwst: Tyddyn Gabriel.

Fenoughty, S. (1997) *The Garden Classroom*: Winston Churchill Travel Fellowship Report on School Grounds in Northern Europe

Fitzpatric, C. N. (1968) *Philosophy and goals for outdoor education*. Colorado State University (Doctoral dissertation).

Ford, P. (1981) *Principles and Practices of Outdoor/Environmental Education*. New York: Wiley & Sons.

Gardner, H. (1993) *Multiple Intelligence. The Theory in Practise*. New York: Basic Books.

Glaserfeld, E. v (1995) *A Constructivist Approach to Teaching*. In L. P. Steffe and J. Gale (Eds.) *Constructivism in Education*. Lawrence Erlbaum Associates, Publishers

Hammerman, D. R. and Hammerman, W. M. (1985) *Teaching in the Outdoors*. (3 ed.) Danvolle: Interstate Printers and Publishers.

- Hattie, J., Marsh, H. W., Neill, J. T. and Richards, G.E. (1997) *"Adventure Education and Outward Bound: Out-of-Class Experiences That Make a Lasting Difference."* Review of Educational Research, Spring 1997, Vol. 67, No 1. University of Western Sydney, Australia.
- Higgins, P. *Outdoor Education for Sustainability: Making Connections.* JAEOL: 13:3, 34-39, 1996a.
- Higgins, P. *Outdoor Re-creation: Connection and Consequence in Outdoor Education.* JAEOL: 13:4, 4-11, 1996b.
- Higgins, P and Loynes, C. *Towards Consensus on the Nature of Outdoor Education.* JAEOL, 13 (3), 00-00, 1996.
- Higgins, P. Loynes, C. and Crowther, N. eds (1997) *A Guide for Outdoor Educators in Scotland.* SNH: Perth.
- Hodgkin, R. *Mountains and Education.* Alpine Journal, 86 : 330, 201-211, 1981.
- Hopkins, D. and Putnam, R. (1993) *Personal Growth Through Adventure.* London: David Fulton Publishers.
- Hunt, J. (ed) (1989) *In Search of Adventure.* Bournemouth: Talbot Adair Press.
- Jonassen, D. (1991). *Evaluating Constructivist Learning.* Educational Technology, 36(9), 28-33.
- Kaplan, R. and Kaplan, S. (1994) *The Experience of Nature.* A Psychological
- Kolb, D. *Experience as the Source of Learning and Development.* New Jersey: Prentice Hall, 1984.
- Kraft, R. *Towards a Theory of Experiential Learning.* In: R.J. Kraft and M. Sakofs (Editors), *The Theory of Experiential Education.* Boulder, Colorado: Association for Experiential Education, 7-38, 1984.
- Learning for Life Group. (1993) *Learning for Life.* Scottish Office: Edinburgh
- Learning Through Landscapes (2000) *Grounds for Concern:* Report on the condition of secondary school grounds
- Loader, C. (1952) Cairngorm *Adventure at Glenmore Lodge.* Edinburgh: William Brown.
- Loynes, C. (ed) *Finland Welcomes Europe and the World.* Proceedings of the European Conference, April 1996, JAEOL 13 (2), 1996.
- Maddern, E. *Initiations a Coda.* JAEOL, 8:1, 32, 1991.
- Maddern, E. *What is it Fifteen Year Olds Need? Notes on Initiations Appropriate to Our Times.* JAEOL, 7:1, 29-32. 1990.
- Matthews, M.H. (1992) *Making Sense of Place. Children's Understanding of large-scale Environments.* New York: Harvester Publ.
- Mortlock, C. (1984) *The Adventure Alternative.* Cumbria: Cicerone Press.
- Nabhan, G. P. and Trimble, S. (1994) *The Geography of Childhood - Why Children Need Wild Places.* Boston: Beacon Press.

- Neuman, J.(1999) *Introduction to outdoor adventure education in Czech Republic*. In *Outdoor Education, Adventure and Experiential Learning* (ed. EIOAEL) European Congress Report. Penrith: Adventure Education p. 13-15. ISBN 1-874637-34-2
- Nicol, R. and Higgins, P. (in press) *Perspectives on the Philosophy and Practise of Outdoor Education in Scotland*. In: S. Sorlin (Editor) *Outdoor Recreation: Practise and Ideology from an International Comparative Perspective*.
- Nicol, R. and Higgins, P.(1998) *A Sense of Place: A Context for Environmental Outdoor Education*. In: P Higgins & B Humberstone (Editors) *Celebrating Diversity: Sharing Cultural Differences*. Buckinghamshire: European Institute for Outdoor Adventure Education. p 50-55.
- Orr, David.W. (1992) *Ecological Literacy. Education and the transition to a Postmodern World*. State University of New York Press.
- Priest, S. *The Relationships among Change, Programme Type and Facilitation Technique in Adventure Programming*. JAEOL, 13 (2), 22-26, 1996.  
Pub. Trentham Books. ISBN 0 948080 42 0
- Repp, G. *Outdoor Adventure Education and 'Friluftsliv' seen from a Sociology of Knowledge Perspective*. JAEOL 13 (2), 63-66, 1996.
- Revell, P. (2000) *'Why selling games fields can lead to better sport'* (article in Times Educational Supplement, 2.6.00)
- Ross, C. & Ryan, A. (1993) *'Can I Stay in Today, Miss?: Improving the School Playground'* School curriculum & assessment authority (SCAA) (1996). *Teaching Environmental Matters through the National Curriculum*. SCAA Publications. ISBN 1 85838 123 1
- Schön, D. (1993) *The Reflective Practitioner. How Professionals Think in Action*. New York: Basic Books.
- Sebba, R. (1991) *"Landscapes of Childhood."* Environment and Behavior, Vol 23.No 4.
- Smyth, J. (1998) (ed) *Learning to Sustain*. Stirling: Scottish Environmental Education Council.
- Tellnes, A *Friluftsliv - Traditional Norwegian Outdoor Life*. JAOEL 9 (1), 16-19, 1992.
- The national curriculum: Handbook for Primary Teachers in England* (1999). DfEE and QCA. HMSO
- The Outdoors - The Roots of Life - Nature - The True Home of Culture*, International Seminar of Outdoor Activities Olomouc, september 25-27 1998, Palacky University Olomouc, Faculty of Physical Culture, Czech Republic. (78s
- Titman, W. (1994) *Special Places; Special People - The hidden curriculum of school grounds*. WWF UK.
- Ziegenspeck, Jörg W, Higgins P., Humberstone B. (red) *Zeitschrift Für erlebnispädagogik*, Heft 9/10/11, 19. Jahrgang (1999), *Outdoor Education and Experiential Learning in UK*, Institut Für Erlebnispädagogik
- Vazansky, M. *Leisure and experiential education* (1992)

## In German

- Beyersdorf, M., Michelsen, G. and Siebert, H. [Hrsg.] (1998) *Umweltbildung: theoretische Konzepte - empirische Erkenntnisse - praktische Erfahrungen*. Luchterhand.
- Bolscho, D. and Seybold, H. (1996) *Umweltbildung und ökologisches Lernen: ein Studien- und Praxisbuch*. Cornelsen Scriptor.
- Köpke, A. (1995) *Die Reform muß weitergehen. Wider die Lernunkultur an unseren Schulen*. PÄD EXTRA, 6, 39 - 44.
- Reich, K. (1996b) *Systemisch-konstruktivistische Pädagogik*. Neuwied, Kriftel, Berlin.
- Ziegenspeck, J. [Hrsg.] (1992) *Erlebnispädagogik : Rückblick - Bestandsaufnahme- Ausblick*. Verl. Ed. Erlebnispädagogik.

## In Czech

- Hanuš, R., Jirásek, I. (1996) *Výchova v přírodě*. Ostrava: VŠB-Technická univerzita..
- Neuman, J.(1998) *Dobrodružné hry a cvičení v přírodě*. Praha: Portál.
- Neuman, J., Vomáčko, L, Vomáčková, S.(1999) *Překážkové dráhy, lezecké stěny a výchova prožitkem*. Praha: Portál.
- Neuman, J., Doubalík, P., Šafránek, J., Vomáčková, S., Vomáčko, L., Brtník, J. (2000) *Turistika a sporty v přírodě.Přehled základních znalostí a dovedností pro výchovu v přírodě*. Praha: Portál.
- Neuman, J.(1995) *Výchova v přírodě*. Praha: FTVS UK. 100 pp.
- Važanský, M., Hanus, R.(editors) *Výchova a pobyt v přírodě na konci 20.století*. Proceedings of national conference Králíky. Olomouc: FTK Olomouc-Nadace Pangea.

## In Swedish, Danish, Norwegian

- Allmänna Barnhuset. (1998) *Barndomens platser - miljöns betydelse för identitetsutvecklingen*. Rapport.
- Att erövra Omvärlden*. Barnomsorg- skolakommittéen, läroplan 1-5 år, Skolverket, S o U 1997:157
- Bang, C. and Braute, I.N. (1997) *Följ med ut - Barn i Naturen*. Stockholm: Universitetsförlaget.
- Christianson, S. A. (1995) *"Undervisning med känsla ger bättre minnesbehållning*. Skolvärlden, No 16.
- Dahlgren, L.O. och Szczepanski, A. (1997) *Utomhuspedagogik - Boklig bildning och sinnlig erfarenhet*. Ett försök till bestämning av utomhuspedagogikens identitet
- Friluftslivets pedagogik *För kunskap, känsla och livskvalitet*, Liber 1999,
- Grahn, P., Martensson, F., Lindblad, B., Nilsson, P. och Ekman, A. (1997) *"Ute på dagis"*. Hur använder barn daghemsgården? Utformningen av daghemsgården och dess betydelse for lek, motorik och koncentrationsförmåga. Alnarp: Movium förlag. Stad och Land, Forskningsrapport.
- Johansson, S. 1997/98 *Runt i Naturen* Del I och del II, UR -förlag.
- Key, E. (1995) *Barnets århundrade*. 4:e uppl. Stockholm: Skriftserien ABF.

- Lindholm, G. (1995) Skolgården - vuxnas bilder barnens miljö. Alnarp: Movium SLU.
- Molander, B. (1993) Kunskap i Handling. Göteborg: Daidalos
- Nikolaisen, A. (1998) Nærmiljøet som klasserom - Uteskole i teori og praksis. Cappelen Akademisk Forlag
- Nobel, A. (1990) Hur får kunskap liv? Om konst och eget skapande i undervisningen. Statens Kulturråd. Allmänna Förlaget i Stockholm, edition 1:2
- Nordheden, I. (1995) Verkligheten som lärobok. Stockholm: Almqvist & Wiksell.
- Olsson, T. (1995) Skolgården - det gränslösa uterummet. Stockholm: Liber Utbildning.
- Pramling, I. (1995) Mångfaldens pedagogiska möjligheter. Stockholm: Liber.
- Rasmusson, B. (1998) Stadsbarndom - Om barns vardag i en modern förort. Socialhögskolan, Lunds Universitet. (Doktorsavhandling)
- Sandell, K. och Sörlin, S. (1994) "Naturen som fostrare: Friluftsliv och ideologi i svenskt 1900-tal." Historisk Tidskrift, 1994:1.
- Szczepanski/Ekström, (1991) Nycklar till Naturen . Med barnen i närmiljön, Liber Distribution,
- Söderström, M. och Blennow, M. (1998) "Sjukfrånvaron mindre hos daghem som är mycket utomhus. En retrospektiv undersökning 1995." Läkartidningen (No 8/98).

## **Proceedings of the European Institute of Outdoor Adventure Education and Experiential Learning (EIOAEEL) conferences**

- Amesberger, G., Schonghuber, K. and Krehan, E. (1996) Youth and Social Work on the Move. Proceedings of a Conference held at Spital, Austria, October 1996. Institute of Sports Science, University of Vienna.
- Crowther, N., Higgins, P and Nicol, R. (1998) The Contribution of Outdoor Education towards Learning to Sustain. In : J. Smyth (ed) Learning to Sustain. Stirling: SEEC, pp 58-60.
- Higgins, P and Humberstone, B. (ed) (1998) Celebrating Diversity: Learning by Sharing Cultural Differences. Proceedings of the 1998 Conference held in Scotland. Buckinghamshire: European Institute for Outdoor Adventure Education.
- Higgins, P. and Humberstone, B. (1999) Outdoor Education and Experiential Learning in the UK. Luneberg: Luneburg University Press.
- Higgins, P., Amesberger, G., Bowles, S., Becker, P., Humberstone, B., Keus, B., Neumann, J. and Schirp, J. (1998) Outdoor Adventure Education: Learning by Sharing Cultural Differences. In: P. Higgins and B. Humberstone (editors) Celebrating Diversity: Learning by Sharing Cultural Differences. Buckinghamshire: European Institute for Outdoor Adventure Education.
- Humberstone, B., Amesberger, G., Bowles, S., Becker, P., Higgins, P., Keus, B., Neumann, J. and Schirp, J. (1998) Culture, Diversity, National Communities and Outdoor Adventure Education. In: P. Higgins and B. Humberstone (Editors) Celebrating Diversity: Learning by Sharing Cultural Differences. Buckinghamshire: European Institute for Outdoor Adventure Education.

Loynes, C (editor) Special Issue of the Journal of Adventure Education & Outdoor Leadership, 13 (2). Proceedings of the 1996 Conference held in Finland. Penrith, Cumbria.

Neumann, J., Mytting, I. and Brtnik, J. (editors) (1996) The Outdoor Activities Seminar, Prague . Proceedings of the International Seminar in Prague 1994. Verlag edition Erlebnispädagogik-Lüneberg.

Szczepanski, A Outdoors, Adventure and Experiential Learning - A Wreth of European Concepts, European Congress Report 1998, Outdoor Education, (s26-30), Adventure education

## **Organisations**

GROUNDS FOR LEARNING, University of Stirling, Stirling FK9 4LA, Scotland.

LEARNING THROUGH LANDSCAPES, Southside Offices, Winchester, SO23 9DL, England.

NATIONAL ASSOCIATION FOR ENVIRONMENTAL EDUCATION UK  
University of Wolverhampton, Walsall Campus, Gorway, Walsall, WS1 3BD, England.

TIDY BRITAIN GROUP 'Eco-Schools' Project, The Pier, Wigan, WN3 4EX, England

## Useful Websites

### **Centre for Outdoor Environmental Education**

#### **Linköping University Sweden**

The website contains details of programmes at MSc and PhD levels, research and consultancy activities and a wealth of useful information and links.

*<http://www.liu.se/esi/>*

*<http://www.liu.se/esi/fmup/welcome.html>*

### **Edinburgh University - Outdoor Education Section**

The website contains details of programmes at BSc, MSc and PhD levels, research and consultancy activities and a wealth of useful information and links.

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

### **National Association for Environmental Education UK**

*<http://www.naee.co.uk>*

### **Socrates, Comenius project 2.1 Outdoor Education- Authentic learning in the Context of Landscapes**

Presentation and follow up of In service training courses as well as the project itself.

*<http://www.ode.kind.se>*

### **Technische Universität in Berlin**

*<http://www.tu-berlin.de/zek/wb/prjstart.htm>*

### **The Association of Nature Schools in Sweden**

*<http://www.naturskola.a.se/english>*

### **The European Institute of Outdoor Adventure Education and Experiential Learning**

Develops theoretical foundations for the field of outdoor activities. Promotes alternative education and complementary education through the means of outdoor activities.

*<http://www.eoe-network.org/>*

**OUTDOOR EDUCATION:  
AUTHENTIC LEARNING IN THE CONTEXT OF LANDSCAPES**

Volume 1

**An international collaboration project  
Supported by the European Union  
Comenius Action 2.1 European In-Service Training Courses**

**CONTENTS**

**Preface**

**Introduction: What is Outdoor Education?**

Prepared by all project partners

**The Course**

Prepared by all project partners

**Teacher Qualities**

Philosophy, Knowledge and Understanding, Competencies and Skills  
Prepared by all project partners

**Student Outcomes**

Learning with Heart, Hand and Head  
Prepared by all project partners

**Course Content of a Sample Programme**

**Theoretical and Practical Overview**

Prepared by all project partners

**What is Outdoor Education?**

Peter Higgins and Chris Loynes

**Why Educate Out of Doors?**

Peter Higgins

**The Landscape Of The School Grounds**

Sue Fenoughty

**Introduction to Outdoor Education in the Czech Republic**

Jan Neuman

**Outdoor Education Initiatives at the Teacher Training College of the Diocese of Linz**

Marianne Neissel and Clemens Seyfried

**A 'Construed' Link Between Outdoor Education and Constructivist Pedagogy**

Clemens Seyfried

**Outdoor Environmental Education in a Swedish and Nordic Context**

Anders Szczepanski

**Selected Readings**

**Project Partners**

## **Keywords**

Outdoor education, outdoor classroom, learning out of doors, citizenship, education, problem-based learning, ecology, environmental education, experiential education, education for sustainable development, thematic education, health

Editors: Margrit Hensler, Pete Higgins and Robi Niccol

Cover picture: The Tree of Knowledge, felt-work made by the project group.

Printing office: Kisa-Tryckeriet AB in Kisa, Sweden, September 2002

ISBN: 91-631-2904-3

This book has been part financed by the European Union and is a result of project 71609-CP-3-2001-1-SE-COMENIUS-C21