

Green Learning Environments

Identifying best practice in non-formal learning in the natural environment for children with special education needs.

Intellectual Output 1 – Gathering Best Practice



Tree and Bulb Planting at Bluebell Park

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Executive Summary

This report identifies the best practice in non-formal learning in the natural environment for children with special education needs (SEN), using case studies, and talking to experts from Belgium, Slovenia and the UK; three countries in which currently there is no standardised nature-based skills on the curriculum. This particular document focuses on one of three intellectual outputs: gathering best practice. The OECD framework suggests that there are three forms of learning: formal, which is identified by clear structure; informal, which may be described as experience; and non-formal, which lies between the two, and is explorative, and directed by the engagement of children. Intellectual Output 1 (IO 1) aims to highlight good practice in Green Learning Environments (GLE) to support the development and recognition of non-formal learning.

In addition, IO1 has initiated a network of those interested in sharing best practice and developing GLE.

At the start of the project the partners involved met and explored the variation in language and categorization of children's needs in order to reach a consensus on the categorization of conditions. The policy on delivering special needs education varies among countries, and sometimes within them. This assessment of best practice looks at whether this leads to variation in the way that non-formal learning in the natural environment is structured. In research conducted at the inception of the project six points were identified as important to the gathering of information to the formation of best practice examples. These were: activities meeting children's needs, the identification of appropriate GLE sites, thorough risk assessments, the delivery of the activity in the determination of what it involves, length of time, and the size of the group, an assessment of the benefits of the activity, and a follow up assessment, as a way to maximise activity value. In relation to these six points, fifteen experts have been identified, interviewed, and their thoughts summarised.

Whilst the interviews presented significant common themes, they also highlight that there is a variation in the way that non-formal learning techniques manifest into teaching in the natural environment. The common themes pulled out of the interviews will be identified in summary. Some experts agreed that children are children, and therefore SEN has no great impact on this, with GLEs providing no significant challenges to children with SEN. Further to this point seems to be the argument that human response to nature is instinctive. This innate link with the natural world is the key to all forms of learning in the natural world, and is not confined to children, or just to children with SEN. Another theme pulled from the interviews was that GLE can be so beneficial because the natural environment acts as a stimulant, stimulating senses and therefore children's learning. GLE activities can be adapted for children with particular SEN. Further to this, GLE can be adapted to focus on particular sensations, providing opportunity for children with less tolerance to sensation. In these interviews experts repeatedly stressed that the adaptability of non-formal learning in the natural environment is one of its biggest benefits. Its fluidity between formal, informal, and non-formal learning means that the constraints are removed.

Overall our results have been very positive, creating a solid foundation for the next stages of the GLE project.

Responses	Number
Case studies	145
Interviews with experts	15

Although there is a limited academic evidence base, anecdotal evidence suggests that children achieve greater learning through GLE, than through classroom taught sessions. Experts tend to agree that learning in the natural environment is a completely different experience to classroom learning. The removal of the restriction of four walls allows children who may have additional needs in the classroom to thrive in the outdoor environment. GLEs have further benefit in the types of movement associated with being in the natural environment, which have been linked to improved neurological development.



Introduction

Research shows that children learn better and are more concentrated/focused when learning in a green environment (forest, park or nature) This conclusion is especially valid for children with special educational needs (e.g. ADHD, autism-spectrum, etc.) or learning disorders. To our best knowledge however, no standardised curricula or off-the-shelf educational material or methods on nature-based basic skill development is available in the three countries/regions involved in the project (Flanders-Belgium, Slovenia and the UK).

Nevertheless, individual teachers and schools practice teaching outdoors: take advantage of the multiple formal and non-formal learning stimulants present in nature to teach on e.g. mathematics and language, in the meantime improving generic skills (such as motor skills, cooperating, assessing and coping with risks, orienteering skills, creativity, etc.).

Green Learning Environments is a multi-disciplinary project will combine expertise from “green” partners with experiences from schools for children with special needs. Through peer learning, exchange of practices and capacity building between the partners involved, we will develop an innovative toolbox for non-formal learning in green environments for children and young adults with special educational needs.

The objectives of the project are:

1. to facilitate non-formal learning with children with special educational needs in green environments
2. to increase awareness on the facilitating atmosphere in nature and forests for formal and non-formal learning for children in general, but for children with special educational needs in particular
3. to list, exchange and review good practices regarding non-formal learning and basic skill teaching of children with special educational needs in green environments in Europe, with the aim of joint learning and capacity building
4. to develop, test and distribute innovative educational materials and methods for acquiring basic skills, through non-formal learning in contact with green environments
5. to stimulate European cooperation between the staff of the project partners (e.g. on the different traditions and cultures related to teaching the target group) and to stimulate the awareness of other European cultures within the target group.

Green Learning Environments has three outputs:

1. Gathering best practice
2. Development of a toolbox of resources for Green Learning Environments
3. Development of a policy brief to support wider application of Green Learning Environments.

This document deals with **Intellectual output 1 – Gathering Best Practice**

Describing non-formal learning

In 1996 the OECD developed a framework for learning. This framework primarily looked to describe and categorize a wide range of learning types that took place through an individual's life. The study looked at how these forms of learning differed, how they were recognized, with qualifications or similar and how they could be harnessed more effectively to support the economy. The idea is that increased learning leads to greater productivity and therefore supported the growth of the economy. Whilst the OECD perspective is an economic one, the framework of different types of learning has been used more widely.

Three forms of learning were identified:

- **Formal Learning** – identified by having a clear objective, structure, being specifically organised and intentional.
- **Informal Learning** – identified as day to day experiential learning, by definition no clear objective, with no imposed structure. This may be summed up as “experience”

These two forms of learning are relatively well understood, with the general consensus on their definition.

- **Non-Formal** learning exists somewhere between the definitions of formal and non-formal learning. The consensus on what it means, but generally it is agreed that non-formal learning is structured and may have stated objectives. However, the actual learning and experience leading to learning is led by exploration and is directed by, for instance, the children involved in an activity or programme.

Learning	Organised	Structured	Intentional	Clear objectives	Example
Formal	yes	yes	yes	yes	Everyday teaching of curriculum
Informal	no	no	no	no	Learning as a result of an event, any interaction, meeting or activity
Non-formal	yes	no	no	yes	Forest School

The three countries involved in the Erasmus+ Green Learning Environments are signatories to the OECD learning framework described above. Each country has produced a high-level report on the three types of learning described by OECD.

Non-formal learning is not always well understood, nor made visible and therefore is sometimes not valued.

Green Learning Environments aims to highlight good practice to support the development and recognition of non-formal learning and help improve the quality of life for children.

Special Educational Needs

Terms and policy framework

Learning Green Environments is identifying and developing best practice for non-formal learning activities for children with special education needs. The terms used to describe education practice across countries and even within countries vary. In what is a specialised profession, the terms to describe children's needs and conditions and the frameworks within which people work have evolved locally and nationally.

As part of a workshop at the inception of the project, the project partners took time to explore the variation in language and categorisation of need used in this sector, across and within countries. Through discussion, a consensus was achieved and six categories were identified. These categories were based on the Belgian system (name??), which was seen to be particularly useful as a way to bring the three countries together. Within these six categories a series of conditions were identified. Teachers from the three countries involved in the partnership worked to get consensus both on the types and the most common terms used for conditions within each type.



Figure 1 Erasmus at Work – Three teachers, each from a different country work to develop common terms

Type	Description	Terms used across the partnership						
1	Cognitive Mild	Moderate Learning difficulties	Severe learning difficulties	Down's Syndrome	Fetal Alcohol Syndrome	Specific Learning Difficulties	Acquired brain impairment	Mild intellectual abilities (IQ 60-120) or serious learning difficulties
						single diagnosis (e.g. dyslexia)	NAH	T1 and T8
2	Cognitive Severe	Moderate or severe intellectual difficulties	Profound and multiple learning difficulties					
		IQ <60						
3	Behaviour/emotion	Challenging behaviour	Oppositional defiance disorder	Attention Deficit hyperactivity disorder	Behavioural and emotional disorder	Social Emotional Behavioural Disorders		
					GES	SEBD		
4	Physical	Physical disabilities	Developmental coordination Disorder	Acquired brain impairment	Physical difficulties			
			DCD	NAH				
5	Communication	Hearing impairment	Specific Language development impairment	Governo Jezikovne Motnje	Gluhi Maglusni	Slepi in Slabovidni	visual impairment	speech and language difficulties
			STOS				T6	
6	Autistic Spectrum Disorders	Sensory processing difficulties	Autistic Spectrum Disorders	Motnje Senzorne integracije				
				T9				
	Identified as most common terms							

Slovenian colleagues added the following categorisation that may be used in conjunction with the table above:

1. **COGNITIVE MILD, MODERATE AND SEVERE** (for example Down Syndrome, this children have learning difficulties, lower intellectual abilities, poor concentration and motivation, poor memory,...)
2. **EMOTIONAL AND BEHAVIOURAL PROBLEMS** (emotional disorders, behavioural disorders and combination of both: oppositional defiance disorder, aggressive behaviour, no empathy, challenging behaviour...) **PHYSICAL DISABILITY** (spina bifida, cerebral paralysis, multiple sclerosis, head trauma, spinal cord, chronic disease)
3. **CHILDREN WITH A VISUAL IMPAIRMENT**
4. **CHILDREN WITH A HEARING IMPAIRMENT**
5. **CHILDREN WITH SPEECH AND LANGUAGE IMPAIRMENT**
6. **CHILDREN WITH A COMPLEX LEARNING DISABILITIES** (dyslexia, dyscalculia, dyspraxia... occur frequently with ADHD, ADD, autism, spectrum disorders...)
7. **AUTISTIC SPECTRUM DISORDERS** (the obstacles in the field of social communication and social interaction and behaviour, activities and interests)
8. **CHILDREN WHO HAVE TO BE IN A HOSPITAL OR ANOTHER MEDICAL INSTITUTION FOR A LONGER PERIOD** (bulimia, epilepsy, eating disorders, ...)
9. **ADHD**
10. **SENSORY INTEGRATION DISORDER** (may appear as a single neurological issue or as problem under specific conditions)

This output from our workshop can be used to help to categorise best practice and certainly is useful as a means to cross reference terms used by those we contact for best practice examples.

The grid is not complete, and new terms are added as they come forward through partners work or feedback from experts and those providing best practice examples. The grid can aid discussion between partners and potentially can be used to identify practices that are particularly suited to children with one or more of the types of conditions described in the grid.

Policy

Within the Green Learning Environments, we have two distinct structures for the delivery of special needs education.

Within the UK and Belgium, it appears that there is a similar focus on schools developing programmes responding to individual needs and not constrained to a large degree by a curriculum. Inevitably this means that there is a lot of variation between schools in the delivery of formal, informal and non-formal education. We also identified that language to describe conditions may differ between schools. There is a focus on health and safety, perhaps even more prevalent in the UK than Belgium.

The Slovenian educational system is more centralised, with schools delivering the same curriculum and with a more standardised language. There is less focus on the needs for health and safety assessments. One explanation of this is that Slovenia has much higher levels of natural space than either Belgium or the UK.

From this non-scientific assessment, it would appear that the lower the levels of green space, the greater the need for health and safety assessments, or the greater the emphasis that is placed on such assessments.

Countries with high levels of green space are more likely to have a greater understanding of the environment and therefore perhaps, less fear of using the outdoors for education. It may also be the case that Slovenia and Belgium are less litigious countries!

Our assessment of best practice will look at whether these different systems lead to any variation in the way in which non formal learning in the natural environment takes place.

What is needed from best practice examples?

At the outset of the Green Learning Environments we wanted to identify information that was going to be of most use to those who may refer to the best practice examples and use the toolbox in the future.

Based on the workshop in Brussels, six points of information were seen to be of importance in the gathering of information and the development of the toolbox:

1. Activities meeting children's needs – Identifying the specific activity and the needs of the children involved were seen to be fundamental elements of the toolbox. Having clear recommendations and guidance would enable assessment of the best practice examples and provide the basis for the development of the toolbox. Using the framework described above may be the basis for grouping and describing activities.
2. Preparing or identifying sites – the need to identify what sites might be most suitable for an activity was highlighted. This has several aspects:
 - a. That the site enables the activity to be carried out has points of interest
 - b. How a site might be prepared, ensuring access is good, enabling the children to make best use of the site for the activity
 - c. That permissions are in place if the site is not in the ownership of the organisation organising the activity
 - d. Knowing whom to ask about the ecology of the area
3. Risk Assessment - best practice in risk assessment for the activity. This may include
 - a. Specialist skills needed by those organising the activity
 - b. Child: supervisor ratios
 - c. Specifying that exact location for the activity, this should identify where the site has been prepared for the activity
 - d. Assessment of the ground conditions, vegetation (trees) and potentially limits in terms of weather. This also takes into account the accessibility for children with different needs
 - e. Use of the materials found on site for art or den building or whatever other activity might be organised
4. Delivering the activity – what does the activity involve, how long should it last and what is the best size of group? What materials and equipment might be needed? What clothing is needed?
5. Assessing the benefits – in many of the discussions in the first workshop the need to ensure that there were opportunities to assess the benefits of the activity, show links to the other programmes (possibly to the curriculum in some countries where the activity takes place in a school) and to be able to “sell” the programmes to key decision makers who could either act as champions of Green Learning Environments or undermine them.
6. Follow up and signpost - Adding to the Green Learning Environment by having follow up activities once back inside and signposting to other sources of material, books and in particular online, was seen to be a good way to potentially maximise the value of the activity.

Gathering Best Practice

There has been no systematic assessment or evaluation of non-formal learning developed for children with special educational needs.

Gathering information was the first activity for our project. Following local and international workshops, a segmented target audience of potential non-formal learning providers and advocates was identified.

An on-line questionnaire was developed, discussed and finalized by the Erasmus Partners. The questionnaire was translated into Slovenian, French, and Dutch and sent to 300 people and organizations.

15 experts were identified and structured interviews were held with these experts.

Target Audience	Online	One to one interviews (selected)
Schools	X	
Scouts/Guides	X	
Outdoor learning networks	X	
Project leaders	X	X
Environmental organisations	X	
Outdoor learning experts		X

The questions asked in the initial online survey are provided in Appendix 1.

In addition, we also looked at academic paper and other publications and websites that might help to inform best practice and support the development of the Toolbox.



Figure 2 GLE Display at Green Lane

For each response to our survey, a tree was planted at Green Lane School during one of the partner visits.



Figure 3 Tree planting to develop GLE at Green Lane

A framework for compiling the responses

In our workshop, as well as starting to develop a framework that we might use to come up with a common or understandable cross reference between countries for conditions that children involved in Green Learning Environments might have, we also looked at the different stages of learning.

The “Learning Flow” ideas were considered as a possible additional framework for Green Learning Environments.

Joseph Cornell has developed this framework, consisting of four stages:

Stage One: Awaken Enthusiasm

Quality: Playfulness and Alertness.

Benefits:

- Builds on people’s love of play
- Creates an atmosphere of enthusiasm
- A dynamic beginning gets everyone saying, “Yes, I like this!”
- Develops alertness and overcomes passivity
- Creates involvement
- Minimizes discipline problems
- Develops rapport between participants, leader, and subject
- Fosters positive group bonding
- Provides direction and structure
- Prepares for later, more sensitive activities

Stage Two: Focus Attention

Quality: Receptivity

Benefits:

- Increases attention span and concentration
- Deepens awareness by focusing attention
- Positively channels enthusiasm generated in Stage One
- Develops observational skills
- Calms the mind
- Develops receptivity for more sensitive nature experiences

Stage Three: Offer Direct Experience

Quality: Communing with nature

Benefits:

- Fosters deeper learning and intuitive understanding
- Inspires wonder, empathy, and love
- Promotes personal revelation and artistic inspiration
- Awakens an enduring connection with some part of nature
- Conveys a sense of wholeness and harmony

Stage Four: Share Inspiration

Quality: Idealism

Benefits:

1. Clarifies and strengthens personal experience
2. Increases learning
3. Builds on uplifted mood
4. Promotes positive peer reinforcement
5. Fosters group bonding
6. Encourages idealism and altruistic behaviour
7. Provides feedback for the leader

In its pure form this may not be entirely suitable for Green Learning Environments. However, adapting the four stage approach it would allow:

- Best practice examples to be fitted to be to both the needs of the children and the objective of the group leader
- Identify practices that complement one another within a lesson or across a programme or activity, suitable for the needs of the children involved and the objectives of the group leader
- Provide a way of thinking about Green Learning at a strategic level for an organisation

Stage	Activity	Programme	GLE Strategy
Awaken Enthusiasm	Activities within a session ↓	Activities across a period of several weeks ↓	Start to get support from key decision makers through good use of the toolbox and best practice, sharing experiences with a community of similar organisations
Focus attention			Show the impacts of the GLE activities
Direct experience			Get engagement from key decision makers
Share Inspiration			Key decision makers as advocates for GLE – job done!

Combining our two frameworks we will be able to describe our best practice examples effectively.

	Type					
Stage	1	2	3	4	5	6
Awaken Enthusiasm	Best Practices examples X,Y,Z					
Focus attention					Best Practices examples A, B. C	
Direct experience						
Share Inspiration						

A group leader or teacher, looking for best practice could identify the range of conditions and the stage of Learning Flow to select a set of activities or perhaps just one activity that best meets the needs of the children and the objectives of the leader.

Survey of best practice for learning in the natural environment for children with special educational needs.

The first element of our review was to survey schools and organisations to gain examples of best practice in the delivery of learning in the natural environment. The survey also asked a number of other questions about the types of skills need and the range of support provided by their organisation and/or the parents of children involved.

From Survey Monkey we received 145 responses as of 1st March 2017¹.

A summary of the responses is provided in the table.

Number of responses	145	
Meaningful	122	
Do you run specific programmes of activity for children with special educational needs that make use of the natural environment for non-formal learning?	68	
Would you like to be involved in a network sharing best practice identified through this project? This may also mean that we contact you to follow up this survey.	107	
At what stage are you in the delivery of these programmes?	63	scored from 100
Is non formal learning in the natural environment important for your organisation ?	81	scored from 100
Is there management support for the programme?	76	scored from 100
Parental support	95%	Supportive
Trained	30%	of leaders

There is a great demand for the development of a “network” to share ideas and practice, with 87% of responders saying that they would like to be involved in such a network. Of the 68 responses with examples of practice delivery, many were similar, with Forest School by far the most popular practice. Several were low level engagement that were not considered best practice for this work.

¹ We have left this Survey Open and will check back regularly to see if any useful information has been added that can contribute to the toolbox.

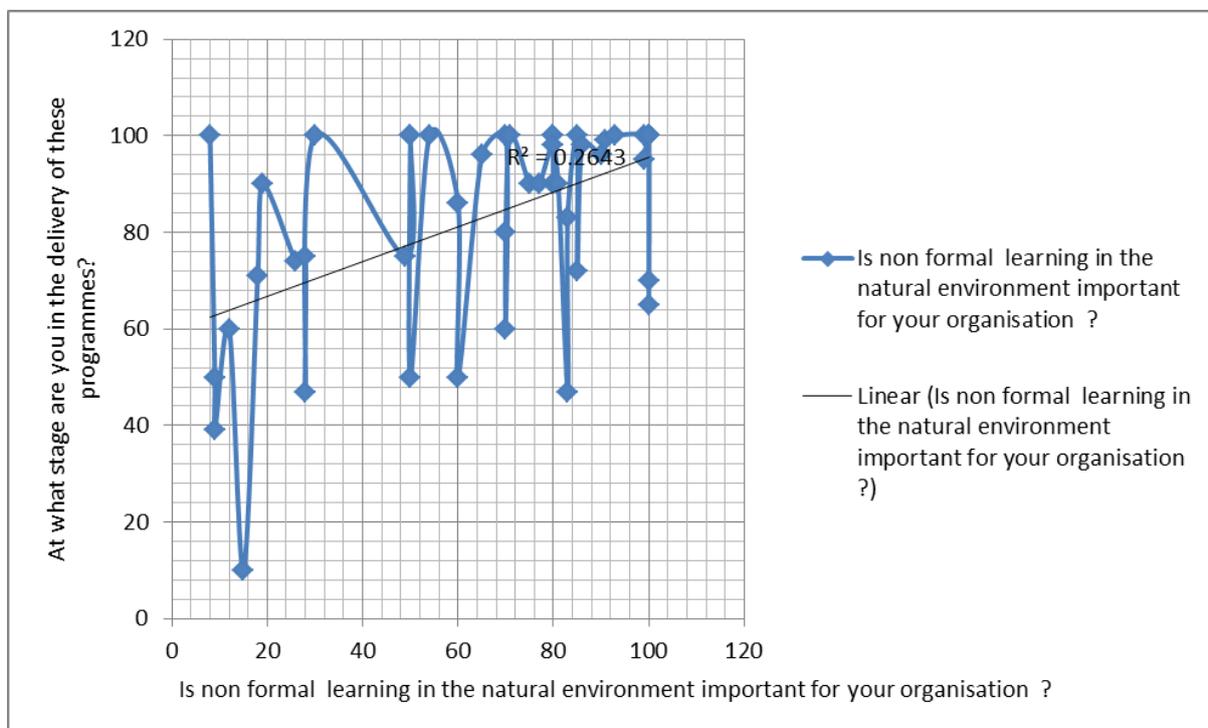
When the reviews were completed we were left with 25 examples that were considered useful for the toolbox. This is not a large number. During the collation practice examples, it became clear that there was a lack of guidance and support for Green Learning Environments practice. The fact that we only found a relatively low number of examples perhaps highlights the importance and significance of the ERASMUS+ GLE work.

The examples are provided in Appendix 1.

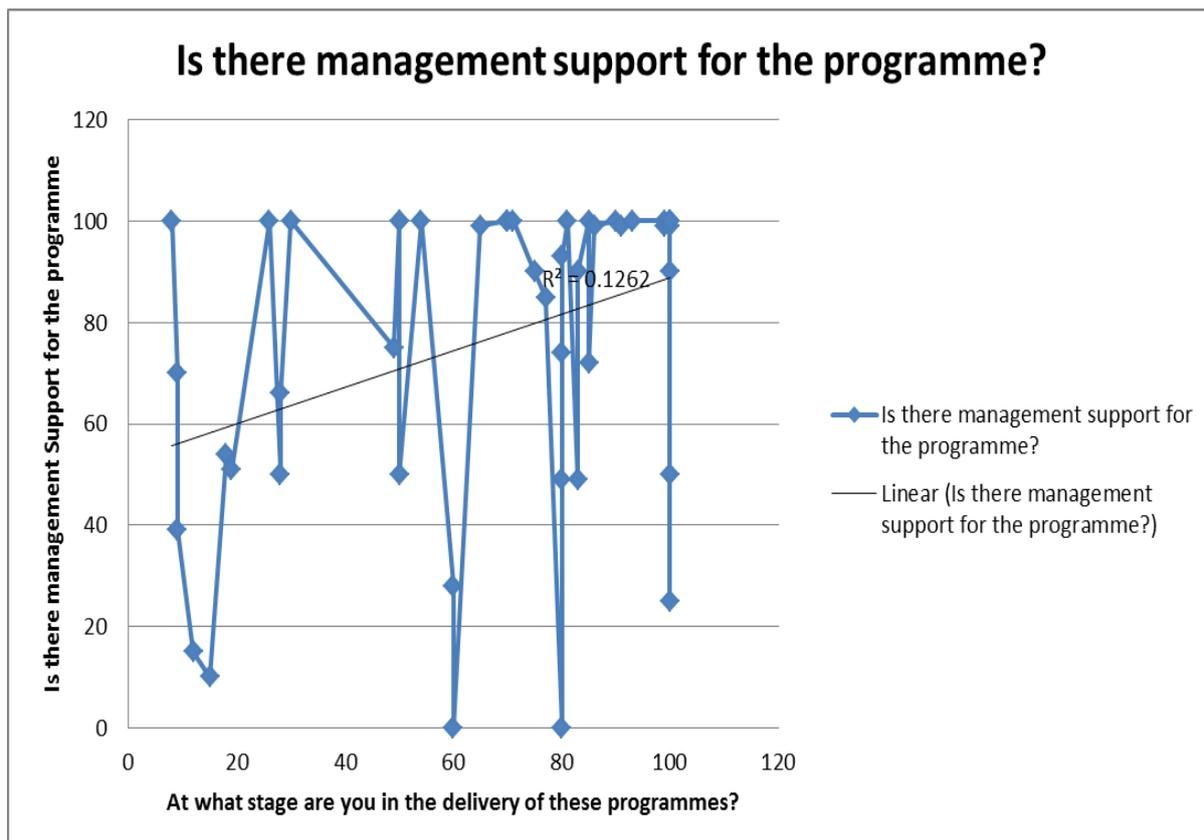
In the survey, we also looked at the support that was provided for GLE in the different organisations we approached. Whilst there was some variability, in most cases the people delivering GLE had support from parents (score of 95% support) and management (76% support on average).

The importance of non-formal learning in the natural environment was high (81%), for the organisations that responded to the survey.

The moderate relationship between importance for an organisation and the stage of development of the programme.



There is a weak relationship between stage of delivery and management support.



There was a great deal of variation in the experience of the practitioners; some very experienced and some just starting - which on reflection is health balance.

Surprisingly, only 30% of the practitioners were specifically trained in GLE. Taken together with the call for a network of practitioners we could interpret the responses as pointing toward opportunities for training and recognised certification/qualifications that might make use of the GLE Toolbox².

² See also response from FSA in UK suggesting a SEN Module for Forest School courses

Literature Review

A limited literature review was carried out at the start of IO1.

In general, there is a lack of specific literature for the topic covered by the project. Some examples of papers are provided below.

Outdoor play decisions by caregivers of children with disabilities: A systematic review of qualitative studies:

<http://www.childrenandnature.org/research/various-factors-influence-the-outdoor-play-decisions-of-caregivers-of-children-with-disabilities/>

2. Unruly children in unbounded spaces: School-based nature experiences for urban learning disabled young people in Greater Manchester, UK:

<http://www.childrenandnature.org/research/attempts-to-mitigate-perceived-risk-result-in-education-and-leisure-opportunities-that-are-highly-structured-and-supervised-for-students-with-disabilities/>

3. “Natural schoolyards decrease stress, strengthen attention, reduce behaviour problems, and enhance factors associated with resilience in children of all ages”

But not specific about disabled children

<http://www.childrenandnature.org/research/green-schoolyards-as-havens-from-stress-and-resources-for-resilience-in-childhood-and-adolescence-2/>

There is a need for more academic research in this area.

Expert interviews

Summary

Fifteen interviews with what Erasmus Partners thought were experts with useful knowledge and insight were carried out.

These experts ranged from practitioners through educators to educational psychologists. These interviews provide a rich source of information for the development of the GLE toolbox. The full text of the interviews is available in Appendix 2, which is provided as a separate document.

The interviews provide a much richer source of material than the practice examples by nature of the experience of the interviewee and the extended discussion that took place. There was a wide range of views and perspectives provided by the interviews, but some important, common themes emerged:

1. That 'children are children'. Several experts were very clear that they saw each child as needing individual attention and children with SEN were no different. In this way learning in green environments was seen not as a particular challenge for children with SEN. Rather it was down to the session leader to use the rich resources available in the natural environment to create opportunities for learning for children of all abilities and needs.
2. We respond instinctively to nature. We are genetically predisposed to respond to nature. Bringing out this innate link to nature is a key part of all learning in the natural environment.
3. The natural environment stimulates our senses. More than a classroom setting, the natural world provides a changing array of colours, smells, sights, textures and sounds that can stimulate children's learning. For children with less tolerance of sensation, GLE can be adapted to focus on particular sensations.
4. Brain development is complex. There is increasing evidence to suggest that the type of movement stimulated by being in the natural environment, with uneven surfaces and the need to maintain balance and navigating obstructions, can help to improve brain development.
5. The natural environment provides many resources for learning.
6. Some children thrive in the natural environment. Whilst there is no academic evidence, anecdotal evidence suggests that these children do much better and achieve greater learning through GLE.

Lily Rowe Horseman

Kindling Play Cumbria, England

Date interviewed: 17 January 2017

By phone/face to face: Telephone with Jo Sayers, The Mersey Forest

Contact number: 07789 723061

Address: Cumbria

Email: lily@

Website: www.kindlingplayandtraining.co.uk

Lily has a background in play work, and then as a Forest School Leader, she is also a Forest School Leader trainer, and Chair of the Forest school Association.

What is your role with children and your experience working with children with SEN? I have done a number of projects where children have been included in these projects, Forest School programmes they are inclusive by their nature. Some work we have been doing not within school but inspired by the approach, was outdoor natural play sessions on a housing estate in a big urban fringe area of west coast Cumbria, which has lots of challenges in terms of social economic issues, and they were quite inclusive sessions involving children with a range of different needs and different SEN too.

I also have been doing some work with Carlisle Youth Zone, a youth club which has a morning session open to anybody with quite a lot of children with special educational needs. In the afternoon there is an inclusion group which specifically supports that group, and so we have been looking at how to adapt visits to the woods with woodworking skills, cooking skills, working with fire and practical hard skills with the individual's abilities or whose understanding means, they need extra support.

At Carlisle the types of SEN the children had included: spinal mobility, a child who was a wheel chair user. Her hand grip was poor, so we supported her trying to using simple tools, with one to one support. Interestingly when watching the impact on her using a knife - she was peeling bark off a stick, you could see she was intensively focussed on it - she doesn't have much speech and language but we observed the impact on her of being able to use a tool, with support was interesting. She was making a little mouse; she cut a piece of thin willow at an angle and a slight slope on it, scrapes the bark off, and then drew a face on it. The focus was on working with her to create something appealing to her but at the same time being realistic and achievable.

I also worked with some people who had specific educational needs; we ran cookery sessions around the fire, making pancakes. I have also worked with people who have been referred because they are on the autistic spectrum; it's quite a big centre for referrals.

Are the activities, the ones she does with the group in the morning - different when working with specific needs? The activities are the same, and actually when you adapt those tasks for children with SEN then you have an approach which can also be used with individuals whose confidence or motivation is really low, allowing us to work up and down the range.

Ages: The morning group was aged 7-11, and in afternoon the young people with SEN aged 11-25. In the afternoon there are about 30 or 40 who come to the club, as it's a big regional referral centre and very popular because in rural areas of Cumbria access to services is quite sparse.

I worked with a young boy with a 1 to 1 worker, he didn't have much speech and it wasn't clear what he wanted to do so. He was sawing some wood with us for about three seconds and then he would go and we would carry on and then he'd be back, again and again for a similar time span. It was interesting working with him and how you need to be receptive with someone who doesn't have the attention span, yet an ability to stay with something for a long time, having the intention to come back again and again.

Jo – I guess up to us as leaders to allow for individuals to take their own time over the task and choose the duration of the activity, rather than assume we will do a demonstration and then expect them to do it perfectly, stay with it until they have completed of the activity. Some individuals might choose to go off tree climb for a while and then come back later to the task, we as leaders need to adjust our own needs and expectations (the focus on task completion); it's allowing them the freedom to opt in or out that's important.

Lily - You need to think about your expectation about what you want them to do as a practitioner, you might not be able to do a demo but instead have to go straight into action if their concentration span is low. I worked with a boy, he was on the autistic spectrum, and didn't have much verbal communication, we were doing some tools, he watched for a while I demonstrated but, he wasn't talking to me, so the plan was let's just go with this and start using the tool. It did require me to accept he was doing it in his own way, had I not been confident in my own skills, this might have been worrying. If someone is ready to go try and meet them as quickly as you can, because that might be the only opportunity you have to engage with them. It's important not to impose restrictions on what they can and can't use.

Jo – Yes it's important to see their ability rather than what they can't do and test things (different tools) and how they get along and try something else if they are not able to manage a tool.

Gender differences in the groups and what they were interested in: In the Carlisle Youth Zone Group there were more male participants: 25% female/75% male, in terms of interests there were no significant differences, because there was no resistance to cooking over the fire, or with tools.

The group had mostly one-off sessions rather than progression over a number of weeks, as they are not Forest Schools but use similar approaches and similar skills. There has been some progression though, as we've been doing the sessions for a couple of years now. The participants come with a range of skills and chose more complicated activities over a period of time, even though there is not an intention of progression in the programme.

The setting was on site at the centre with a concrete yard with hedges, not much of an outdoor feel, so we have also taken them to a richer outdoor setting at local woods, but then there is a pressure on ratio of staffing, which is a shame. At first, one boy was really resistant to going away from the centre and didn't like anything out of the ordinary; he's on the autistic spectrum. We persuaded him to come along and came back full of enthusiasm (according to his mum), we'd been showing him the plants there and horsetails – which are a prehistoric plant and he'd seen things he'd been reading about.

Would you introduce the children to the woodland before the first session? Especially those young people on the autistic spectrum can find it stressful going to a new place they are not familiar with?

I think where they can it's great, but the logistics of that can be hard to outreach before a session (mainly financial issues adding to the costs of the session). When a group are coming from a SEN unit the children come with their staff to meet us at a site by bus as the site is a long walk from the unit. We encouraged the staff to understand and tell us when the individuals have had enough and that made things a lot more flexible, and they were also able to visit before by themselves with the dedicated staff. With other groups they don't have additional staff to do visits beforehand.

We have used a lot of photographs with an individual who was worried about attending a session - we showed photos of key points along the road, to help him understand where they were and match them with the places he would see along the route, we had sequenced the photos of things we were going to see - when we were crossing the road there would be a photograph and he knew how many more things he could find along the way such as the features of the of the wood. This idea became embedded in culture of the whole group.

Were there any limitations of the site? Was it level, big or small? In inner city Leeds there were a number of small urban woodland fragments with nice bits to use. We drove to the woods, one had a steep slope, although the group had no physical disabilities it was quite a challenge at first motivating them to exercise, the group hadn't been expected to walk far. In the first few weeks the children were walking the first few hundred yards and getting tired, by the end of a long term programme they had a mile walk to do and were very motivated. After a few weeks it became part of the norm, we would go and look at areas of interest and do activities on the way so it wasn't just a walk.

Boundaries used on the site: With all groups on these sites, I start off small and then expand the area, but I have no special policy with children with SEN. I get the children to take ribbons and get children to mark the boundaries as a way to re-inforce them.

Did they observe the boundaries? Yes, there was one boy (age 4) - no matter where the boundary was he'd be always 6ft beyond it. He had emotional needs, so when he arrived, the site within the wood was a long way from roads and stressed about this, so the first week we gave him a member of staff to be with and he walked in spirals into the wood, decreasing in size to the site where we were working, so he would know the whole area. The second week he did another spiral, and after to that could go in with the group, as he felt more comfortable. We took extra staff along because of his lack of his confidence.

Seasonal times of working outdoors with children and young people with SEN: this depends on individual's needs: for example, one child had Reynaud's Disease on top of the SEN, as well as limited mobility, and because we had two programmes running: one starting in February and another in May, it felt unkind to push them into a situation where they would be uncomfortable participating. If it had been the only option it wouldn't be good to stop someone participating.

Something which would help is a having a bale of straw on site, to enable the child to have somewhere insulated to sit down.

What is your approach to learning (is it formal/informal/non formal)? - for Forest School and the open access play programmes/ out of school sessions I have run, I have been lucky in not having any imposed expectations about what was the outcome to be, other than that coming from the children themselves.

Feedback from teachers, impact on their learners -teachers/staff who have come along to sessions have seen the individuals in a different context to what is seen normally, this has been

through informal observations, rather than formal feedback. This is way I work. In the New Economics Foundation document there is a table 'Proposition to change' I have used. When running FS programmes it shows how observations can help record progress around interests and it isn't changed for children with SEN.

Ysgol Pentre report: New Economics Foundation

<https://forestschoools.files.wordpress.com/2013/11/an-evaluation-of-a-forest-school-project-pentre-forest-school.pdf>

[http://www.outdoorlearningwales.org/images/uploads/resources/files/Guide to Forest School Booklet\(Eng\)FINAL.pdf](http://www.outdoorlearningwales.org/images/uploads/resources/files/Guide%20to%20Forest%20School%20Booklet%20(Eng)FINAL.pdf)

Resourcing Outdoor Non Formal Learning: Work with Carlisle was funded weekly sessions woodland types of skills, by the local Rotary Club (<https://www.rotary.org/>). Flood Relief funding from central government, (the centre flooded during Storm Desmond in Cumbria floods in 2015), Core budget of the organisations, and other small pots e.g. private business sponsorship/local trusts.

What feedback was given by the children/young people? Children's feedback was informal - such as their delight at being involved in more sessions. From the staff again informal, the staff were surprised talking about things they didn't expect the children to be interested in e.g. cooking outside (children were fascinated by the fire cooking and how the fire cooked things).

What would we do differently next time?: What has worked one week doesn't work always the next; you need skilled staff to be able to adapt and work out next what they want to do and support them within their comfort zone at first.

Jo - When working with children with behavioural issues, I find sometimes, children can be excluded from the outdoor sessions because of their behaviour within school outside, staff are cautious and worry that the children are going to play up, when letting off steam is probably what they need to do, do you have the same situations where this has happened?

Lily - It is written into my Forest School policy that Forest school isn't to be used to as punishment or reward. If someone wasn't well you wouldn't punish them. This is part of my discussions with staff before I start. I have a group of year 10/11 boys and if they are on the programme that indicates they aren't doing well in school. Part of negotiation with staff means that unless there is a situation where you seriously fear for safety of everyone in the group, you can't pull them from the programme.

Even children excluded from school turn up to Forest School. One boy arrived at school and was covered in blood, he'd had a fight, the school had the confidence to send him to my session; it was something I was really impressed with. Speaking to him alone, I found he'd had a physical fight with his dad/father that morning, he had a black eye. The teacher said afterwards if he'd have been in mainstream school the day he would have been excluded by the end of the day due to his anger levels and no release; at Forest School we gave him a pile of wood and he just smashed it, but by the end he just sat and carved and whilst he didn't really speak to any of us he was able to get himself calmer.

I think the more anecdotes we have of similar situations we have in outdoor sessions can help create more confidence in staff that we have the skills to deal with these situations.

Working with SEB (social/ emotional/behavioural issues) schools: at a high school, we were brought in to help children who weren't getting expected grades, so set up a 10 week project. The sessions were offered to a wider group (others could opt in to join) and some were referred by staff. Some children were reluctant to take part at first. First week, one individual sat on a log with his hood up and ignored people for the whole session, a long time from 10-2pm. Another boy went into an anxiety based shutdown and went to sleep, we made him a nest in some leaves, it was a stress response and when we were talking to him afterwards, he said *'I didn't like it the first week I didn't know where I was and it made me feel weird'*. The next week he was *'oh wow come over here this is where I slept, come over here because the trees look like different'* which shows he was still processing the surroundings of his environment. Sometimes the kids need time out not to be busy all the time.

Sometimes with that group I let my colleague to support them and I'd just sit and let them talk about things, focus of activity got less and less over time, but more about discussion and how they felt about themselves.

Summary top tips: developing non formal learning with SEN depends on your attitude and confidence - try/test things out yourself, work with tools differently and see how many ways they can be used. Have a wide range of activities, tools and resources to use to see what suits the situation.

Check out Lily's website and tinderbox blog: <http://kindlingplayandtraining.co.uk/the-tinder-box/>

Why is it important to engage SEN in the natural environment? I don't differentiate, and why would you not engage children with SEN? The outdoor setting is a place children find all sorts of things of learn about themselves, opportunities to relax, try new things. Children who excel in academic setting may find themselves in a different hierarchy in the class compared to their normal experiences, and children with SEN may have better developed skills to level them with other children.

Lisa Wigglesworth

Callands Community Primary School, Warrington, England

Date interviewed: 6/2/17

By phone/face to face: Face to face

Contact number: 01925 444795

Address: Callands Community Primary School, Callands Road, Callands, WA5 9RJ

Email: sch_callands_primary@warrington.gov.uk

Website: <http://www.callands.warrington.dbprimary.com/warrington/primary/callands>

Lisa Wigglesworth, NLE, is head of a Forest School, with a Masters of Education specialising in pupils with SEN.

Can you tell me why you think it is important to engage children and young people with SEN in the natural environment? When we do any green learning we see very different children to those that we see in the classroom. We see children that may have additional needs in the classroom that then thrive in the outdoors. It's a very different environment that allows them to do very different things, see very different skills. If you take speech and language as an example, they may not be very verbal in the classroom and may not use their language well, in the outdoor environment they can communicate in a very different way. Boundaries and barriers are more limitless in the outdoors.

Are there any academic frameworks or models that you think help to explain the benefits for young people with SEN of non-formal learning the natural environment? I am not aware of any. The reading we have done is around Forest Schools and Scandinavian research and not specific to SEN.

Can you tell me about your role in relation to working with children and young people with SEN in the natural environment? That's a big part of what we do at Callands. First of all we began the Forest School which was just for Early Years Pupils (EYFS), and then we rolled it out to Key Stage 1. Now we offer it at Key Stage 2 and that came from the children – the school council said that there was so much pleasure and so many limitless activities when involved in Forest School and that stopped at Key Stage 1. Now we offer a Forest School after school club for Key Stage 2.

The lovely thing about that is that we have attracted a group of children that did not attend any other clubs. I personally oversee the after school clubs, the training, approved the finance, overseeing the school development plan. I have three Forest School trained staff now representing EYFS, Key Stage 1 and Key Stage 2.

We also needed to develop the environment so we've had a recent build for EYFS and Key Stage 1 have moved into the old EYFS building as it has outdoor provision. It is on our school development plan to allow Key Stage 1 to really access an outdoor curriculum. We also have access to woods at the back of the school and lots of outdoor sessions take place there. I feel that some staff limit

themselves in terms of weather and it's a mind-set. The EYFS staff don't care about the weather. We feel developing the outdoors is an on-going project.

For the sake of this research we have adopted 11 categories of SEN. Which categories of children have you worked with in natural settings? All our categories of SEN have worked outdoors. We especially capitalise on outdoor learning with those children who have communication difficulties and those with social, emotional and mental health difficulties. They access Forest School. We try to use the outdoor environment outside of Forest School too for physical development needs. Because we are inclusive we ensure there are no limitations for any child although they may have support to success outdoor learning.

Can you tell me about some examples of working with these groups?

The sessions: if the session is Forest School specific then a Forest School accredited member of staff will lead. If the session is a general outdoor session then all staff are experienced enough now to lead. Our PE lead also has a big responsibility in outdoor learning. She leads outdoor learning during playtimes. Midday assistants have had training on playing games outdoors at lunch time.

For Forest School specific sessions EYFS go out once a week for half a day. In Key Stage 1 this is fortnightly. In Key Stage 2 this is mainly an after school club, but in curriculum time it's a blocked week during the year. This is because there are more restraints in the curriculum in Key Stage 2.

General outdoor learning in EYFS and Key Stage 1 is every day.

We have residential visits too. Year 6 go to France, Year 4 go on an outdoors residential, and Year 2 go to Beeston. All our residential are outdoor based. All our SEN children are included in this.

The site: EYFS have a soft play area which is outdoors; it is gated but overlooks the fields and the woods. This was very deliberate in its design. We have on-site mini woods so Forest School always starts their sessions there so that children can develop their skills and then head out into the main woods and fields at the back of school. The Key Stage 1 outdoor area has growing pits in which they can dig and grow; they also have logged areas where they can build. They also have open access sheds with equipment boxes which the children independently use. Key Stage 2 utilise the playground, fields, on-site woods and the main woods at the back.

PE is outside all year round. Science is often outside all year round depending on the unit of study. We have a courtyard with a pond, bird bath/boxes, sundial and mini-beast homes. All year groups use the courtyard and it is used all year. We also do observations of plants growing throughout the year. Forest School is also all year round. An objective on our school improvement plan is to use more geographical skills in Geography and History, this will take place outside. This came from pupil voice interviews – the children said they wanted to be more like archaeologists.

Approach to learning: I would say non-formal. There is always a plan behind an activity but part of the plan will be to give children freedom. There are objectives to the session but the children lead the way.

We have detailed plans; just about everything we do is planned. This is also to make sure that the scaffolding is there to support pupils with additional needs and that we have planned any extra support that is needed.

We sometimes adapt the materials to meet the needs of pupils. We don't currently have children with physical needs that we need to adapt for.

Practicalities of running sessions: appropriate CPD to begin with: Forest School accreditation, enquiry based science training (we use enquiry based science throughout the school and this is why outdoor learning lends itself so well to our science curriculum), OAA training (outdoor and adventurous activities). Staff request materials as and when they need things according to their planning, e.g. replacement logs, new tools.

There are no real costs to running outdoor sessions after the initial set up costs because you just use your environment. We are always trying to make the environment better. From the Forest School point of view the staffing is quite high but we use parents to help and have trained our parents to help to reduce costs. I don't think it needs to be costly. We have never accessed any funding on the day to day running of outdoor learning.

Review: On the whole most children love it. There is the odd cohort that don't like it because of the weather, but most children enjoy that. I do think it is cohort driven as our current EYFS will do anything not to go outside. They are the first cohort I've ever known like that yet they have the most beautiful outdoor environment. On the whole it's popular. Generally most of our children like to be outside. We know that from the school council.

Our evidence suggests that all groups of children benefit from outdoor learning in some way although they may benefit in different ways. As an example you may have a group of girls who wouldn't choose to go outdoors but then once in that environment they are very good problem solvers. This sometimes takes them out of their comfort zone as their problem solving is usually academic and it makes them stretch their skills. It's generally boys that choose to be outdoors, you see that straight away from EYFS. If the learning was informal then they may just run around and so they benefit from the direction that non-formal learning brings. We have never experienced SEN being a barrier to outdoor learning as long as the structure is there to support it.

EYFS record their observations. It will be captured in lesson evaluations and in their class data.

One of the key successes is that the children appreciate their school environment. Team skills is a real benefit too. There are very few activities outdoors where children are asked to work in isolation. Also on socialising and problem solving. We've worked really hard over the last 5 years on the five R's of lifelong learning (resilience, resourcefulness, readiness, responsibility and reflection) and the outdoor environment is really good for demonstrating that. Outdoor learning is often out of children's comfort zone and they learn to persevere.

Sue Calverley

Ecolibrium, Warrington, England

Date interviewed: 7/2/17

By phone/face to face: face to face

Contact number: 07962802402

Email: johnsue_goodlife@yahoo.co.uk

Website: www.growlearnenjoy.co.uk

Sue Calverley is a Horticultural Therapist

Can you tell me why you think it is important to engage children and young people with SEN in the natural environment? I think it helps because it is a very natural thing for people to get involved in. It's something that we can all identify with and we all have connections with even though we might not realise it at the time. We are so intrinsically linked with nature and the natural world. I think that is why it works so well.

Are there any academic frameworks or models that you think help to explain the benefits for young people with SEN of non-formal learning the natural environment? I guess I've always come from the viewpoint that I just let it flow. I don't tend to stick to any framework or work towards any qualifications it's just been passed in a very therapeutic way and it's very individual. No set framework apart from the assessment process.

Can you tell me about your role in relation to working with children and young people with SEN in the natural environment? Yes, I was employed at a school for boys with emotional and behavioural difficulties. They came to the school from the age of seven and would stay until the age of 18. They would be referred to me for horticulture therapy and I would work on a very individual basis. Each person had a very individual programme. So we were working towards all the processes of growing things: harvesting them, eating them, making things with them, anything else that I thought would take their interest I would try to include. A lot of it is about building a relationship with that young person because if they don't like you or don't want to work with you they won't so I think it's a very important part of it.

For the sake of this research we have adopted 11 categories of SEN (provide the list)

Which categories of children/ young people have you worked with in natural settings? Young people with ADHD, on the autistic spectrum, Asperger's, behavioural difficulties due to lack of nurture from a very young age. I think that probably covers most of them.

Can you tell me about some examples of working with these groups?

The group: the youngest I've worked with was aged seven and often then they would stay working with me, if they chose to, right throughout the school, until they left at 18. It was usually one to one. Occasionally I would work with a class but they were small so there might only be six.

The sessions: the sessions were weekly. Depending on the individual and how long you could keep the interest for it could be 40 minutes but if they were really into and you felt they would benefit from a longer session then twice that. As a rule I would be on my own. We did have some volunteers who would come because they were training in a similar field and wanted to experience pupils with these difficulties. I would always direct the session and they might just have a social input. Most of the time I was on my own. I worked for 16 years at that school and would see 10-12 pupils a week.

The site: yes it was suitable because I developed it over the 16 years. When I first went there, there were small growing beds, two heated greenhouses and flower beds where they could tend to different plants. Over the years I added different environments: an orchard with lots of fruit, a wildflower meadow, a fish pond which was very popular and an allotment plot so they could have their own allotment. We also had a craft room where we could harvest things and go and cook with them or make crafts with plants which was very useful in the winter when we couldn't go in the garden. We'd cook things, make lots of jam and cordials, when we grew potatoes we made potato crisps. We'd press flowers, make paper do lots of seasonal decorations that they could take home to parents or we'd sell to staff. Christmas was always great for that. I added to it as much as possible to give lots of different experiences and keep their interest. That's especially important with ADHD, if you lose their interest you can go onto a different thing.

The craft room was very useful when it was too wet or cold to go outside. There was always plenty to do – lots of related activities.

Approach to learning: I would say I used all the structures (formal/informal/ non-formal learning) it depended so much on the individual. Sometimes on the formal learning side they might have been referred to me by the class teacher and there might be a particular aspect of the curriculum they needed help with. For instance if they needed more encouragement to do reading and writing I would try to incorporate that into the sessions. With some of the boys you'd need to keep it very non-formal and let them lead and see what they got out of it. You'd use all the experience and knowledge that you've got to bring out the best and make the session interesting and fulfilling. I wouldn't like to say it was any one of those styles.

There was a broad focus. When we used to meet with the therapy team and talk about a particular pupil there might be a plan and I would be trying to address a certain part of that. We would then assess it and see if we were meeting that need.

I always had a series of activities that were suitable for that time of year where the pupil would specify their own wishes about what they wanted to grow. So I did have a plan, yes. You would need to vary the plan because of the individual. We would constantly communicate with the care staff. Sometimes you'd have to be careful how you handled certain situations due to things that had happened outside the school day or at home.

Practicalities of running sessions: we needed a garden with lots of plants, all sorts of horticultural equipment, craft equipment, ingredients for cooking. That was how I chose to do it. I'm not saying everyone would take that approach. I used a wide range of things. I used books, a computer.

I had an annual budget to run the sessions. It was left to me to spend how I saw fit. I would have to keep so much per term because when you want to buy things for a certain season it often doesn't come ready. You can't always plan ahead and buy all your equipment and know that it's going to

get you through the year. With horticulture, because it is so seasonal, you need to make sure you portion it enough to keep you going right through the year. With experience I knew what I needed from term to term.

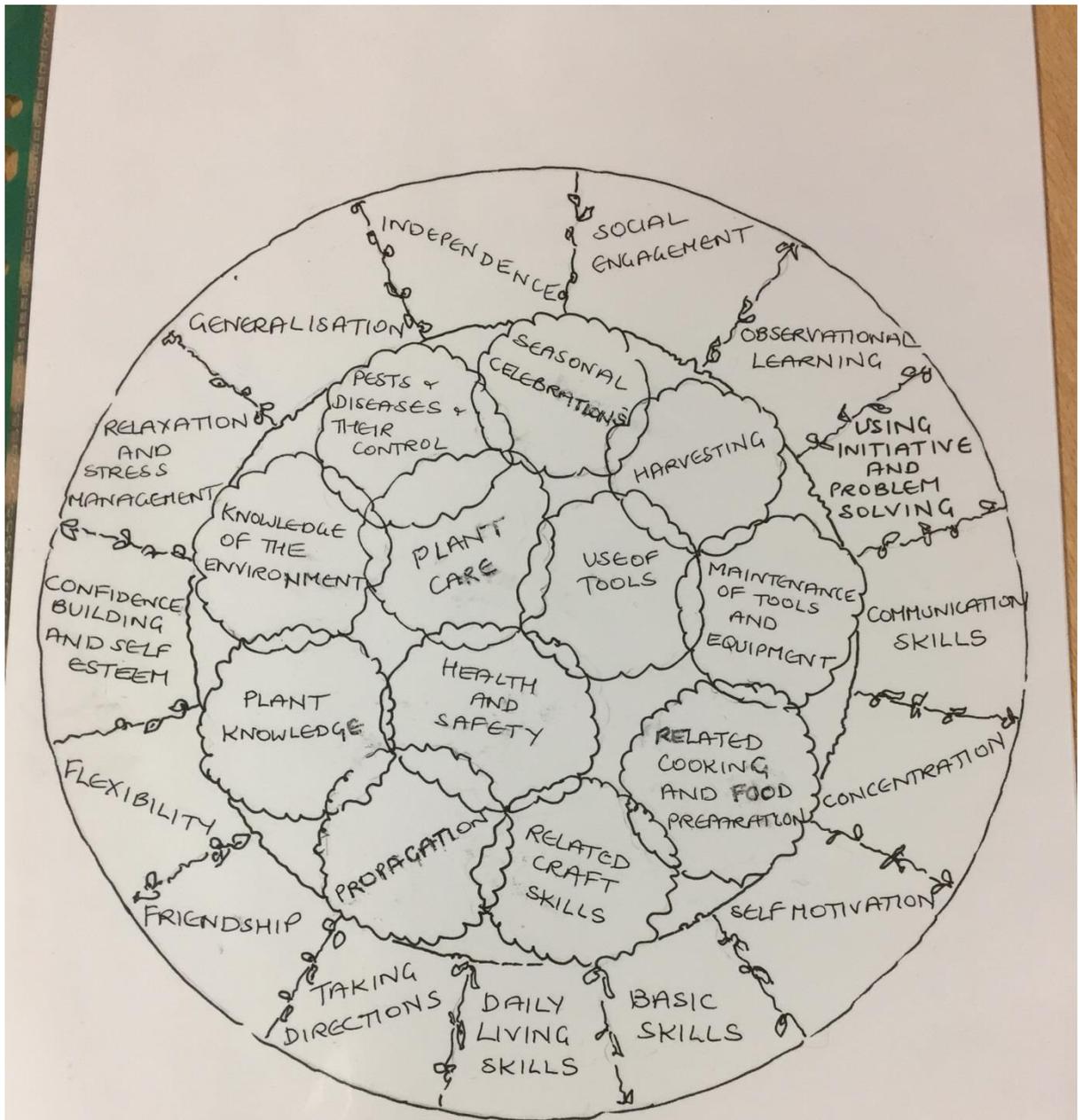
Review

- **How did the children/ young people respond? Was this feedback similar from all children/ young people?** I got feedback from the pupils in a variety of ways. Often it would be verbal. You'd get odd comments and you'd know the pupil was getting something out of it. The little things like "I didn't know that a carrot could grow from a tiny seed" – little observations that would let you know that the pupil was engaging in it. Also from a pupils mood. Sometimes they wouldn't engage at all and it would really be a struggle and on odd occasions you'd have to abandon the session because there might be something else going on in their mind that blocked out engaging with you so there wasn't much point in keeping them there. Sometimes you'd get really joyous singing or they'd be really happy about being in the garden. All sorts of responses.
- **Did staff outside of the sessions give any feedback about the response of the children/ young people following these sessions?** A lot of the time staff would tell me comments that pupils had made after our session. Particularly with day pupils, the pastoral staff would feed back to me what pupils had said or how they'd felt about taking something home to their family or carer. That was a very valuable way of knowing whether the sessions were having an impact and whether it was worth continuing.
- **What are the barriers to this type of approach?** The pupils themselves could sometimes be a barrier. The therapy team would put a plan together for pupils and I would sometimes have the first session and tell that it wasn't going to work and the pupil didn't have that interest. Sometimes they come for a few weeks and decide it wasn't for them and you'd just have to bring it to a close. Some staff weren't totally supportive because they couldn't see the benefits. Some people did, in time, change their mind when they saw a particular pupil benefitting. It made them change their attitude to the therapy.

Is there any written documentation supporting this work? Find attached an article that Sue and the school Educational Psychologist put together for an organisation called Thrive. This details a success story of a boy with ADHD and Tourette's and how the therapy helped.

Is there anything else you would like to mention/add? With this sort of therapy you have to strike up trust and empathy with that person otherwise it doesn't work. A person who becomes a Horticultural Therapist needs to have a real interest in nature; it needs to be part of them to pass it on to someone else. In any session things can change so quickly depending on the individual. You need to be able to change as well and have enough knowledge and passion to be able to move with that and help the pupil stay engaged.

I have always loved nature and plants. I worked for Scope as an activity officer and at one point took on an allotment in the community. The emphasis was getting people out to do things rather than being stuck in an institution. A lot of the people were physically disabled so I found ways to help them access the allotment. Later on I applied for the therapy role and as I had other skills such as craft and cooking I developed the role myself.



HORTICULTURE THERAPY PRACTICE MODEL

WHAT IS HORTICULTURAL THERAPY?

Therapy is the treatment of a disease or disorder, thus Horticultural Therapy may be defined as:

'the treatment of disorder through active participation in appropriately selected programmes of gardening or horticulture'

WHY USE IT?



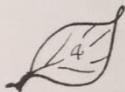
It lends itself to a uniquely wide range of therapeutic applications; humans are inextricably dependent upon plants and contact with nature is widely recognised as an atavistic or even spiritual need to help achieve a feeling of well being.



It can be adapted to suit virtually the entire range of client groups, locations, budget and individuals. It is an activity that is familiar and acceptable to most people at some level and can therefore be normalising and/or introduced as a leisure activity.



Contact with plants has been shown to foster unfocused attention which stimulates rather than mentally fatigues.



Plants are animate, living things, one can directly interact with them and they help fulfil central human needs i.e. contact with nature and the opportunity to nurture.



It provides physical and mental withdrawal from environments that may be difficult or threatening, into one which is more likely to be perceived as stimulating, less threatening and where success can be achieved.



It is meaningful and purposeful in itself and can include a cross-over to nearly all other areas of the formal curriculum.



All the senses can be stimulated – colour, movement, pattern, fragrance, texture, taste, sound etc.



It can be used to develop physical, cognitive, psychological and social skills.



It involves the process of nurturing which can promote satisfaction (physical, intellectual and emotional) and a feeling of self-worth, also improved self-esteem/self-image through achieving success that can be seen/shared with and by others.



Horticultural processes lend themselves to task analysis whereby an element of a task can be deliberately used to address a specific treatment or objective. For example improvement of dexterity by handling small, delicate plants, hand-eye co-ordination by sowing seed, patience by pricking out seedlings, and similarly a host of other mental and physical skills can be addressed by undertaking the tremendous variety of horticultural activities carried out in the garden, glasshouse or home in the gardening year.

First person

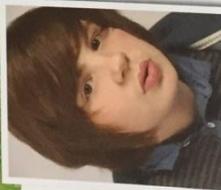
growthPOINT

Growing into the future



"Horticulture therapy is one of the most popular places with the boys and makes a massive contribution to the approach within the school..."

Peaceful setting... Jamie at work in Nugent House School gardens.



Jamie loves laughing and joking with friends and family who he knows and trusts. He loves art, drama and theatre, wants to be an actor and has already had his first walk-on part in a BBC TV show. But Jamie's approach to life hasn't always been so positive.

WHEN he first started at Nugent House School, near Wigan, Jamie's life was dominated by the Tourettes Syndrome, Obsessive Compulsive Disorder and Attention Deficit Disorder with which he had been diagnosed. Just four years ago these issues caused him such anxiety and stress that he couldn't face going to school.

But Nugent House and its horticulture therapy department run by therapist Sue Calverly has changed all this.

"When I first started working with Jamie I knew enough about him to believe that his interests in food, cooking and art could

well be a good starting point to engage him in the garden and start to build a relationship. And one of the turning points was when I gave him a larger plot to look after," explains Sue.

Changing lives

"This plot became his domain, something, somewhere, he had control over. It became important to him that things were growing well and it was weed free. I can still hear his words:

"Is mine the best plot Miss?", then eventually declaring to occasional visitors to the garden area – "This is my plot, it's the best one!". This slight change in wording meant a huge change for Jamie.

Curriculum, it offers a variety of therapeutic services, including massage, play and horticulture and the talking therapies.

The horticulture therapy area encompasses two thirds of an acre of the school grounds. It features working plots; succulents and cacti, a willow dome with a cast iron chiminea that can be cranked up to cook freshly dug potatoes, borders of bright flowers and interesting shrubs full of insects, a fish pond and fruit bushes and trees that need different attention throughout the seasons.

Support and influence
"Horticulture therapy is one of the most popular places with the boys at Nugent House School and makes a massive contribution to the

I knew he was telling himself 'I can be in control, my life can change...'

Shortly after the beginning of his work in the garden, Jamie sat through an entire class for the first time. Today he still has some tics and can sometimes become anxious, but says he knows how to deal with those unwanted mannerisms and feelings. He is confident, clear and empathetic. He is also very grateful for the support offered by Sue.

Building trust

"Sue is someone I could talk to like an adult, she listened to me and was just like a mum sometimes.

In horticulture I had lots of experiences – like jam making, making meals and growing and looking after plants... I had a lot of independence. Sue trusts me, and she taught me about myself. She helped me grow as a person," he says.

Nugent House provides care and education for boys, aged 7 to 19 with complex and additional needs on either a residential or day student basis. As well as a full and varied teaching programme which includes the National

approach within the school, which provides a team around each young person. The aim for that team is to support and influence young people's development and well-being," says Mike Curtis, Educational Psychologist.

Jamie now manages his own plot in the garden and attends a local college and High School on a part time basis. His aim for the immediate future is to attend High School full time. "I don't need to take 'time out' from lessons anymore. I have stepped out of that picture. Stepped out of the cloud... why do I need it? I realised that staff and kids don't care about Tourettes and OCD, they care about me. I like to be occupied and horticulture therapy has helped with that... it's great to be living in the future."

Dedicated areas: Some of the plots at Nugent House School.



Brian Rodgers

Knowsley Outdoor Education Centre, Knowsley Youth Mutual

Date interviewed: 20.02.2017

By phone/face to face: face to face

Contact number: 07825 677 161

Address: Our Place, Longview Drive, Huyton, Liverpool, L36 6EG.

Email: brian.rodgers@youthmutual.co.uk

Website: www.youthmutual.co.uk

Can you tell me why you think it is important to engage children and young people with SEN in the natural environment? I believe that the extra sensory aspect to the delivery of outdoor delivery not only enhances the learning but also extends the experience that can be later reflected upon by the individual. Furthermore, I believe passionately that the grounding that outdoor delivery can bring; no restrictions from the four walls of a classroom can be the difference from someone being able to focus more directly, on what is usually a more practical aspect of learning. It can nurture creativity and imagination, develop learning through play and experimentation and exposes young people to new opportunities.

Are there any academic frameworks or models that you think help to explain the benefits for young people with SEN of non-formal learning the natural environment?

As a Learning Outside the Classroom (LOtC) approved Centre, we have a direct understanding of how Key Stages 1-4 for a variety of subjects including English, science, maths, history and more. All of these aspects have differentiation embedded throughout to ensure inclusivity and achievability by all regardless of ability or condition. Being on outdoor education centre means we are rigorously inspected by statutory and non-statutory bodies including Activity Adventurous Licencing Service (AALS), Adventuremark, the Royal Yachting Association (RYA) and British Canoeing (BC). All of which address key issues of how adventurous activities can be safely adapted to remain inclusive.

Can you tell me about your role in relation to working with children and Young People with SEN in the natural environment?

I have been a Youth Worker for almost 20 years and have worked in the Outdoor Education Sector throughout this time. I work predominately with young people who access my centre either through School or Youth Club and we have hosted the Merseyside SLD Consortium training in Outdoor Education for the last two years. I have worked all over the UK and have settled in Knowsley at the Serene Centre on Lord Derby's Estate.

For the sake of this research we have adopted 11 categories of SEN. Which categories of children/young People have you worked with in natural settings?

All

Can you tell me about some examples of working with these groups: We have worked with young people of all SEN categories some of the include PMLD where the experience was more to do with the sensory aspects of the activity including feeling the wind, water and noises of the birds and

people splashing around to ASD young people and their families, which was about establishing routine and introducing small, achievable aspects in to each session. We have worked with families encompassing an inclusive family day and have taught blind young people to sail and paddle with the confidence and support of their family members.

The group:

- **Was this a group of children/ young people from a mainstream or SEN setting?** We've worked with both from Schools including Hope Primary in Skelmersdale to Alt Bridge in Huyton to learners from Broadgreen International who brought learners with MLD including Down's syndrome and ASD.
- **What ages were the children/ young people, how many were in the session/s/each group?** Ages range from 6-30 years and our session operates on a 1:8 ratio per session
- **Was this a single gender group or mixed/what ratios of m to f?** Typically the groups are always mixed and there seem to be more males to females that access this sort of session. Usually a pre-conception of what 'girls don't like' without the opportunity to determine themselves.
- **What was the level of attendance for these sessions – was this consistent throughout?** These particular sessions are always well attended and can be sometimes used as a respite session for some families.

The sessions:

- **Who led the sessions?** Sessions are always led by a qualified outdoor professional with the support of any specialist teacher/support worker often know to the young person and comes with the group.
- **Who else worked with you during the session supporting the children/ young people, were they experienced in working within this setting/ were they trained?** See above
- **How many sessions were there (duration over weeks/frequency/length of session)?** Weekly sessions during term time for schools; Weekly sessions after school for clubs/groups or during holidays
- **How many groups have you worked with in this way?** Typically 20 groups or so each year.

The site:

- **Can you describe the setting in which you worked with this group, was this the same setting for each of the sessions/ was it suitable for purpose what was good/bad– what could be improved?** It was KOEC and was ideal as we are situated with in a private estate which allowed the young people to enter a space in which no one can enter the session or space without prior knowledge, which proves to be invaluable for ASD young people.
- **What time of year did you work in this area, were there any positives or negatives of the time of year when the sessions took place?** Typically within British Summer Time (BST), positives are that the weather is (usually) warmer and typically easier to enjoy the activity.

Approach to learning:

- **Was it the intention for the sessions to be formal/informal/ non-formal learning (give definitions of these if needed)?** Outdoor Education is fundamentally an informal learning environment although the session is structured to ensure progression is made and monitored.

- **What was the key focus (outcome) of the sessions?** Dependent upon the expected outcomes of the group usually this will be in the form of a National Governing Body (NGB) Accreditation such as an RYA Start Sailing Award or BC Paddle Power Award.
- **Did you have a detailed plan for sessions or are they more free flowing?** All sessions are planned, but the emphasis is always on the learners and can be dynamically assessed to change to suit the needs of the group or to extend a particular aspect of learning.
- **Did you need to adapt/design activities to meet the needs of your group, if so, how?** Every session regardless of group dynamics is bespoke to the needs/established outcomes of the group with an input from myself or a senior member of my staff. It can be as easy as making the outcomes achievable to providing equipment to make the activity accessible such as bucket seats in kayaks to sit on tops to paddle mits and stops.

Practicalities of running sessions:

- **What materials were needed in order to run these sessions?** Dependent upon the activity it could be something as simple as a hoist and bean bags for a sailing boat and non-ambient learner. To a specifically designed boat that would render capsize almost impossible. These are established well in advance to ensure the best possible experience for the individual learners.
- **What was the cost of running sessions?** All costs for activities at KOEC are charged at £10 per person for a 2 hour activity (£80 per session per group – of up to 8 people).
- **How was it funded?** Sessions are usually paid for by the group organiser

Review

- **How did the children/ young people respond? Was this feedback similar from all children/ young people?** The young people always respond positively to the experience although usually quite apprehensive to begin with. This is consistent with their peers from other backgrounds.
- **Who benefitted the most/least for the sessions?** Everyone involved, as the session is developed to encompass this although these activities aren't for everyone.
- **Did staff outside of the sessions give any feedback about the response of the children/ young people following these sessions?** The teachers, organisers and leaders always comment on the development of young people involved, whether it is their confidence or the impact the experience has had on them. There are many positives to outdoor education.
- **What are the barriers to this type of approach?** People's perceptions are fundamentally the biggest barrier along with fear of the unknown.
- **What would you do differently?** All of our sessions are geared towards constantly metamorphosing to ensure development remains constant and learning remains fresh.
- **In summary what were the key successes?** The experience, the feedback and the achievement of those involved whether accredited or personal.

Is there any written documentation supporting this work? Would it be possible to get a copy of these? There is but unfortunately as this wasn't declared to the parties involved, I am unable to share this with you.

Christine Ivory
Bolton, England

Date interviewed: 20 February 2017

By phone/face to face: e-mail

Contact number: 07947714167

Address: 35 Stratford Avenue, Bolton, BL1 6AX

Email: christinejivory@gmail.com

Christine is a self-employed artist and education consultant

Can you tell me why you think it is important to engage children and young people with SEN in the natural environment? Many children find the structure and expectations of the classroom extremely difficult. Our education system relies on children being able to and willing to conform. There is a question as to whether this is the best method/model of education, and whether this possibly outdated model creates disaffection in many children. Any child with additional difficulties will find the process of schooling very challenging. We try and force even young children into long periods of sitting and staying still, and quiet which goes against everything that their bodies and developmental level is designed to do. The natural environment represents space, movement and freedom from the confines of the classroom which is what children need. There are endless possibilities outdoors for children to problem solve in play, really important.

Are there any academic frameworks or models that you think help to explain the benefits for young people with SEN of non-formal learning the natural environment?

Froebel

Nature Theory

Steiner

All of these feed into the Forest School ethos.

Can you tell me about your role in relation to working with children and young people with SEN in the natural environment? When employed as Programme Leader for early years postgraduate teacher training at LJMU I was able to reflect on my practice as a teacher of children with severely challenging behaviour and those with social and communication difficulties such as ASD. This was before initiatives such as Forest School were common but I held a strong belief that the physical constraints of the classroom and school environment were to blame for many of the challenges the children faced. Therefore I would take them outside at every opportunity. Since then I have developed the knowledge I have gained, including from my links to Sweden, and used this in lectures and in consultancy.

For the sake of this research we have adopted 11 categories of SEN. Which categories of children/young people have you worked with in natural settings?

ASC, BESD and MLD

Can you tell me about some examples of working with these groups? Mainstream with several children with challenging behaviour; Year 3 Literacy, 15 in group, mixed, attendance variable. I led session with one other adult, also a teacher. No training had been given to either of us. Several sessions done during the school year. Same setting used, secluded part of school grounds with trees. Not ideal as it wasn't particularly "wild". Children had no wet weather clothing so sessions were dependent on weather. The intention was that the learning would be less formal in a physical sense, ie. children could lie on ground. Focus was to increase attention and concentration and lessen disruptive behaviours. No detailed plan; would often develop into drama. no funding needed.

Key success was children were all more relaxed, happy and engaged. Some mildly disruptive behaviours such as fiddling, annoying others, refusal to comply always disappeared. Have done exactly the same with Years 7 - 11 in Art (mainstream, but challenging), as one adult to 20+ children. Also with children who had BESD and/or ASC, (from a specialist Unit) in small groups with 1:1 support or individually. These sessions would be varied, from playing with the children to having massage sessions, to literacy or maths. Sometimes as chill time so the adults would simply lie down next to the child and watch the clouds, or sing. Some children with ADHD would be able to go outside hourly with a set programme of running or a checklist of activities to do. Being able to stretch, move, lie down etc most clearly affected engagement and behaviour.

A barrier sometimes experienced is the attitude of some staff who consider this type of teaching should only be done as a treat and that all children, no matter what their difficulties are, should learn to conform. Another barrier is in inner city schools where the outdoors is lacking in trees and foliage....but any outdoors is better than none. In every group the children loved being outside.

These examples are from my teaching career which is now 20 years ago....in addition to this as advisor and lecturer I have helped set up many outdoor learning opportunities for both special and mainstream practitioners.

Is there anything else you would like to mention/add? My interest in home schooling and outdoor nurseries is centred around the ethos of active and child directed learning. All too often teachers use funding as an excuse....much can be done with no extra funding if you are willing. Also, another bugbear is the idea that the school "does" Forest School if the children have one session every term...or it comprises the school playing field and one tree. More work needs to be done in informing staff about what FS is.

Fourie

In the heart of Rustenburg, North West Province one will find Oom Paul School. We are blessed with school grounds with large indigenous trees of many varieties while many other schools in surrounding townships and villages are bare. Citrus trees like lemon, oranges and naartjies grow well in the area.

Eco-Code

Mother Nature provides seeds for success: Using the trees we have to educate and propagate.

ACTION

We started to identify indigenous trees from their leaves, seed and bark on the school premises and found Sausage tree, Karee, Wild plum, Wild olive, Coral tree, Bush river willow and East African mahogany. We picked up seeds and then planted them in empty coke bottles. First they were planted in empty toilet rolls for germination but as the weeks passed we had to think of larger containers. We used money that was generated from selling fire bricks, a previous eco-project to purchase manure and potting soil.

RESULTS

Learners enjoyed planting indigenous tree seeds. They experimented beyond the lesson and planted lemon and tomato seeds. One lemon produced 20 saplings! Left over cement from the building workshop at school and empty plastic buckets as well as old rags from curtains in the hostel were used to create bigger cement pots for our young plants.

REFLECTION

Learners were committed to watering plants daily and did not need reminding. They enjoyed showing visitors to the school their knowledge of tree identification and made an ID book with pressed specimens. We will expand our "Elephant Bush" project next and trees will be labelled. We had a wonderful time learning how to make something out of nothing.

Ronny Dierendonck

Afgevaardigd Bestuurder van Stichting Werkcentrum voor Internationaal Vormingswerk (W.I.V.), Belgium

Date interviewed: 9/2/2017

By phone/face to face: face to face

Contact number: 00 32 475 322 984

Address: Lijnmolenstraat 151 B 9040 Sint-Amandsberg (Gent) Belgium

Website: <http://www.wiv.be/index.htm>

Can you tell me why you think it is important to engage children and young people with SEN in the natural environment? It is important for us to learn about the connectivity – verbondenheid – of different things, also nature and people. I have written a book about it; it will be soon published, with publisher Garant, with a section on connection with nature.

Are there any academic frameworks or models that you think help to explain the benefits for young people with SEN of non-formal learning the natural environment? I have created my own methodology, called LuKiDo – Luisteren – Kijken – Doen. This works for people with and without handicap.

Can you tell me about your role in relation to working with children and young people with SEN in the natural environment? When I started about 35 years ago, there was not much going on at the moment. I worked together with nature guides inviting them to guide the tour but I quickly noticed that their approach was too factual. It was not something for the people with special needs. It was all in the head, and not in the hands or the senses.

It's all about listening. So I looked for a way to make it more approachable for people with handicap. So I created my own methodology.

For the sake of this research we have adopted 11 categories of SEN. Which categories of children/ young people have you worked with in natural settings? Diverse.

Can you tell me about some examples of working with these groups?

The group:

- **Was this a group of children/ young people from a mainstream or SEN setting?** Young people and adults with SEN, of different ages, between 20 to 60.
- **What ages were the children/ young people, how many were in the session/s/each group?** 10 to 16
- **Was this a single gender group or mixed/what ratios of male to female?** mixed
- **What was the level of attendance for these sessions? – was this consistent throughout?** I saw a lot of reoccurrence and a development within the people. First they came to see what it is, what there is to learn. Or just to walk outside. Afterwards, they came because they were very interested, they didn't care about the weather. They came for the experience self and deepen the experience. They learnt that it is amazing. There was a change in their heart and their head, which is important to me. They would also do an

evaluation with pictograms: what they liked most and least. They liked the methodology and the experiencing. I put a lot of emphasis on the beauty. I also asked them what has the most beautiful about this walk.

The sessions:

- **Who led the sessions?** Ronny himself as well as a volunteer or two volunteers to help carry things and set up the activities.
- **Who else worked with you during the session supporting the children/ young people, were they experienced in working within this setting/ were they trained?** Volunteers came from different backgrounds: students, educators during summer vacation, retirees. They didn't have to have a background in nature or special education, however, during the intake interview, a screening was done, more or less based on feeling whether a person is fit for the job or not. We were looking for a specific maturity in the people.
- **How many sessions were there?** Anything from one day session to five days session with overnighting, 9.30 to 17.00. and sometimes also an evening session. But because we used all the senses and it was not all about listening or just speaking, people were not tired fast. It was a mix of asking them to concentrate and then let them free for a while.
- **How many groups have you worked with in this way?** Impossible to say.

The site:

- **Can you describe the setting in which you worked with this group? Was this the same setting for each of the sessions? Was it suitable for purpose what was good/bad- what could be improved?** I worked in different settings. I tried to always have something that is typical for the season (leaves or mushrooms in the fall), elements of aesthetics (beautiful landscapes and views), I also looked for something that gave a bit of a challenge for the people: like the dunes, which is not the easiest for these people. Also something that is completely new to them – that challenges their mind, for example the underground caves or even the sewer system museum in Brussel. I worked in the forest, but also at the sea side, also even at the natural history museum. Not all these elements had to be present.
- **What time of year did you work in this area? Were there any positives or negatives of the time of year when the sessions took place?** The seasons were used as one of the main motivation and theme, so on the contrary – the seasons were enriching the sessions.

Approach to learning:

- **Was it the intention for the sessions to be formal/informal/ non-formal learning (give definitions of these if needed)?** Same as below
- **What was the key focus (outcome) of the sessions?** To experience, to connect and to learn, but just very little. Mostly, the idea was that if something would stick, it would be good. And mostly about the seasons and the cycle of life.
- **Did you have a detailed plan for sessions or are they more free flowing?** He had an idea of the theme because he would prepare with materials
- **Did you need to adapt/design activities to meet the needs of your group, if so, how?** E.g. People with lower levels of understanding would only do the sensory exercises

Practicalities of running sessions:

- **What materials were needed in order to run these sessions?** A lot of very specific materials, such as things to try out and eat (tea, jam), things to pick and carry, things to make the sessions more interactive... Figures tied to seasons, such as the lady spring time, or winter man (, who would then help people go look for signs of that season.
- **What was the cost of running sessions?** The materials themselves not as expensive but entry fees to places (such as some nature preserves), paying for transportation, refreshments...
- **How was it funded?** Same as above

Review

How did the children/ young people respond? Was this feedback similar from all children/ young people? They were enthusiastic about them, people relaxed when they were able to relax and awaken their “inner child” through the methods.

Who benefitted the most/least for the sessions? Those who were of lower level of understanding didn't benefit from all the activities but from the experience of being in the nature.

Did staff outside of the sessions give any feedback about the response of the children/ young people following these sessions? n/a

What are the barriers to this type of approach? Nowadays, it's a bit diluted approach. They work with freelancers, who do not have the time to prepare everything, and therefore they do less.

What would you do differently? Today, in these institutions, the people are still using my methodology. And in the city, they also use this methodology. For example, in Kaaihoeve ook.

Kristien Menten

Doezelboz in de Monnikenheide, Belgium

Date interviewed: 16.2.2017

By phone/face to face: skype

Contact number: 0498/ 80 66 26

Address: Monnikenheide Monnikendreef 3 2980 Zoersel

Email: kristienmenten@yahoo.com

Website: <http://www.monnikenheide.be/nl/aanbod/doezelbos>

Can you tell me why you think it is important to engage children and young people with SEN in the natural environment? Because you get nicer stimuli outside in nature. The people with handicap are often easier distracted. It's best to learn through doing and seeing and this is easy to do outside. They understand the themes better when you can show them outside (e.g. eclipse, they went outside to look at it and she had different materials to explain what is happening). They might not remember everything, but at that point they understood it and the main things stay in their mind. People with concentration problems are calmer outside in nature. The atmosphere is "softer".

Are there any academic frameworks or models that you think help to explain the benefits for young people with SEN of non-formal learning the natural environment? Experience based learning. I ask the kids at the beginning of the year what they want to learn and they do that.

Can you tell me about your role in relation to working with children and young people with SEN in the natural environment? I think and operationalize these things myself. I have some volunteers to help in putting this together, but mostly it is me alone.

For the sake of this research we have adopted 11 categories of SEN. Which categories of children/ young people have you worked with in natural settings? Mostly those with Down's Syndrome, but also concentration problems, physical disabilities, very light mental disabilities, many with a combination of disabilities.

The group:

Was this a group of children/ young people from a mainstream or SEN setting? Both and – mainstream kids who are guided by people and youth with SEN, as well as SEN kids guided by myself (Kristien). The SEN people and youth, referred to from now on as SEN guides, are mixed ages, between 24 and 30, with one about 60 year old.

What ages were the children/ young people? How many were in the session/s/each group? Regardless of the groups, they came once a year. 1.5-2 hours per group. Kids are "kleuters": 3-6 years of age.

Was this a single gender group or mixed/what ratios of m to f? Mixed groups.

What was the level of attendance for these sessions? Was this consistent throughout? Of the SEN people who guide the groups, some tried it once and didn't do it anymore. Others kept coming back for more.

The sessions:

Who led the sessions? For mainstream kids, the groups were led by SEN guides, up to three guides per group. For SEN children, Kristien guided the groups (it is easier, as the mainstream kids listened more carefully to the SEN guides, whereas SEN kids would lose attention with SEN guides)

Who else worked with you during the session supporting the children/ young people? Were they experienced in working within this setting/ were they trained? See above

How many sessions were there? One session per year per group, 1.5hrs - 2hrs sessions, mainstream kids: 15 classes and two other kindergarten groups (birthday party and organization): 304 children in total. There are all together 11 SEN guides at the moment. SEN kids: 60 people in three groups.

How many groups have you worked with in this way? Since 2009

The site:

Can you describe the setting in which you worked with this group, was this the same setting for each of the sessions/ was it suitable for purpose what was good/bad- what could be improved? Because the schools have limited funds to go somewhere (transport costs money, all kinds of permissions etc), we decided to create the place here close to us so we could access it easier. Therefore, we go to the same place all the time. This works out fine as well, because we have a toilet at the facility so the small children who come here are easy to help to the toilet. In the neighbourhood there is another nature education place that caters for bigger mainstream kids, so we offer our services to the smaller children.

What time of year did you work in this area, were there any positives or negatives of the time of year when the sessions took place? We work year round. However, if it's very bad weather we don't go out. Also, if it is very cold, some of the people with Down' Syndrome have heart problems, so they get cold fast, and then we have to go in shouldn't get cold.

Approach to learning:

- **Was it the intention for the sessions to be formal/informal/ non-formal learning?** The goal was that they would enjoy it, and learn at least something.
- **What was the key focus of the sessions?** Same as above
- **Did you have a detailed plan for sessions or are they more free flowing?** More or less detailed planning, because SEN people like it to be predictable. They notice if things that you have mentioned, are missing. They also like the repetition and with the use of pictograms, they keep tabs on what has already been covered of the things we said we would cover. Same with mainstream children, they also like predictability.
- **Did you need to adapt/design activities to meet the needs of your group, if so, how?** When there are people who are in wheelchair, I would give them e.g. a handcrafted clay mushroom to look at in their wheelchair, because they cannot bend down to look at the mushroom on the ground. Kids who have concentration problems, I would have a sound amplifier to help them concentrate on the birds song only, because the sounds of nature sounds and people together can be too much stimulus.

Practicalities of running sessions:

- **What materials were needed in order to run these sessions?** I make a lot of the materials self: from clay (different mushrooms, birds' heads to show the different kinds of beaks the birds have); I use pictograms to show them different things; I have mock animal poo that the kids can learn who has pooped in the forest. I bring everything within a buggy or I go and place it in the forest beforehand. That's the advantage of having the forest so close by.
- **What was the cost of running sessions?** Not much, because I make a lot of these things myself.
- **How was it funded?** I have a budget of about €300-400 a year. We ask the small kids to pay 1 euro per kid. For groups, we ask for 40 euros per group. As we know the schools do not have much money, we don't ask much.

Review

- **How did the children/ young people respond? Was this feedback similar from all children/ young people?** The SEN guides made the initiative of becoming a guide. People with Down's Syndrome are extroverted and they like to do those kinds of things, so they enjoy it. Also, these guides really love nature as it is. The guides want to guide all at once, but this is not always best result. But they are so enthusiastic. The mainstream children have questions about the SEN guides, such as the wheelchair of one of the guides, but they move on and forget about their differences fast.
- **Who benefitted the most/least for the sessions?** No answer
- **Did staff outside of the sessions give any feedback about the response of the children/ young people following these sessions?** The teachers who come here with their mainstream classes keep coming back with new classes to be guided by the SEN guides.
- **What are the barriers to this type of approach?** Nothing really. Maybe we should advertise more so more people would come. Then again, I don't have any more time allocated to this. We already get a lot of visitors, internships, study visits.
- **In summary what were the key successes?** The guides are very proud of what they do. They learn and they can show what they have learnt and what they know. They had an event where the press came as well. They were so proud of themselves. For the SEN kids, they are actively doing things outside. They understand things better and some things become more fascinating and less scary (like bugs, when you attach stories to them).
- (added by Katriina): she also mentioned that her director is very open to inclusion and nature education. Therefore, she has free hands to do whatever she wants and she only needs to report once a year what she does. In the beginning she was asked to think of something to do there. This shows the commitment of the director as well.

Is there any written documentation supporting this work ie. case studies/internal reports/ articles/ Would it be possible to get a copy of these? A year report of 2016 – in Dutch. But this cannot be distributed because it has the children's identities in it.

Dejan Sotirov

Institute Rainbow Warriors (Mavrični bojavniki), Slovenia

Date: 13th February 2017, personal

Dejan Sotirov is founder and president of the Institute Rainbow Warriors (Mavrični bojavniki)

How are you organised, what do you do? I am active in two areas. I run the institute Mavrični bojavniki [Rainbow Warriors], which organises camps for children with ADHD; I also hold counselling sessions for pedagogical staff and students at primary and secondary schools in Slovenia. I give lectures to teachers about the modern approach, about who they are, and about why they have to change in order to achieve results.

The institute Mavrični bojavniki [Rainbow Warriors] was established only a month ago; it had previously operated as a society. All of the events will be taking place under the auspices of the institute, which will be operating in Novo Mesto and Ljubljana, while users will be coming from all over Slovenia. The Expert Council is made up of Dejan Sotirov, Rihard Cerk, Marko Juhant, Lučka Sešek, Marija Müller and Maruša Lamut. Until now we have been operating mostly on the level of a gainful activity, by following our instincts, but have now outgrown that framework and need a more serious form of operation. Mavrični bojavniki carries out various programmes that have recently been protected, and a new website is being set up. Our approaches are different, but they are not enough. What is important is who is carrying out the activity.

I would like it very much if individuals in Slovenia would cooperate more. A prerequisite for cooperation is that I create the same energy with the person that I connect with him or her. We will be holding a national expert conference on 24 February on the topic of ADHD and on the topic of children with behavioural disorders, which will provide an opportunity for such cooperation.

Why do you think that spending time in natural environments can be important for children and young people with special needs? The results are evident in the fact that we worked with a child in the office for three months and afterwards took him outside and achieved the same effect in just one weekend. Nature has a positive impact on people in itself; it neutralises many things. With the right attitude everything starts to function. You cannot compare children in the countryside to children in towns; it is obvious that those in the countryside come into contact with nature and keep themselves busy. It most certainly affects their interrelationships, their interaction. I advocate a creative learning path. I say to children: "Change something in nature. Can you make a bunker out of bushes? Do you even climb trees? Do you know what a walnut looks like?" Nowadays, children are no longer spontaneous.

Children accustom themselves to the natural environment differently; they relax in it and many other things occur in the process. The survival training we are practising is more than just an interesting weekend; children learn the skill of survival. They acquire competences, the self-confidence that they can succeed in something. Also very important is the father-son relationship, something that the participants in our camps are greatly lacking. Our society lacks strong male figures. The pillar, the father model which is missing in our society is important. Boys need the role model of a real man, of an authority, of a person who is daring and just.

The Gozdovnik/Woodsman camp, which is organised by Mavrični bojevniki, is the only camp in Slovenia intended for children with ADHD. These children are constantly in sessions with special education teachers and have great difficulties. In their case, the child-mentor ratio must be close to 1:1. There are 40 children and 35 adults at the camp and in the end we are completely burnt-out. There are suicide attempts at the camp, brutal fights, etc. Every fifth child there is taking pills, antipsychotics. We are the only ones in Slovenia who are working with such children.

So far, no proper research has been conducted in Slovenia in the field of ADHD. We are currently conducting a survey in kindergartens, schools and child development clinics. Allegedly, there are about 5% of such children or 2 per class on average. The camp is also attended by dyslexics, children with Tourette's syndrome and those with autism. At each camp there are 3-4 children with autism in every term, which require one-on-one mentoring. We wanted to separate the camps by diseases, but we have decided against it because they are yielding results even though the children differ greatly. 90% of the users have ADHD, which is why we will continue to focus on such children.

The area of cerebral palsy and Down's Syndrome is currently not covered in Slovenia. This is evident from the response from parents. Also very topical and unsolved are eating disorders, Internet addictions, etc. Mavrični bojevniki is not interested in the theories as to why such diseases occur. We are focused on the children's advantages; we look for the positive in children. These children have many talents, which must be highlighted.

The mentoring team also includes people who lack any special schooling but who have rich experience and whom the children accept. One third of the mentoring team is made up of adults with ADHD, including former addicts, schizophrenics and the disabled. Quite a few of them are hyperactive, as am I. And that works, because we base our work on our own example. Such people are capable of reacting splendidly in crisis situations, often better than people with degrees.

How would you explain or substantiate the benefits of, say, the learning of non-formal skills (cooperation, independence, motor skills, movement, communication, etc.) in natural environments for children with special needs? In nature no one says: "It's dangerous, you can't do that", instead we say: "Help me to make something." In nature children learn through their own experiences. We teach them skills, such as intuitive archery, airgun shooting. By doing so, they train to focus, which directly influences the brain. We are interested in their reaction, in making them see what they are capable of. The children divide up the roles and tasks. They share the feeling of being able to accomplish something, that they can manage with something they have found on their own. We give them challenges in the forest, which are quite focused; for instance, we make Indian arrows together.

In the workshop the children learn how to make an arrow and practise their concentration and other skills, which they will be able to use in their everyday lives. Sometimes we only give them partial instructions and they have to work together, figure it out. These children have a hard time working together as a group, because they are alpha males, leaders by nature. These children need attention, which is why mentors must know how to assign a suitable role to them, to address them correctly, to make all of them feel included. When they start functioning as a group, they are very satisfied and proud that they succeeded. Children lack useful knowledge; they spend most of their time indoors, in front of television sets, and are baffled in nature or in their everyday tasks.

Which category of children (intellectual development disorders, sensory integration, behavioural or emotional problems, ADHD, ASD, etc.) do you encounter in your work? The age of the children, the size of the group? You carry out educational activities in nature with them - what exactly do you do

and how? Are they focused activities or are the children playing freely? What does a typical day look like? We cover children with ADHD and partly those with ASD (addicts). The Gozdovnik/Woodsman project targets mostly older children in secondary and primary schools, while programmes for younger children are still being developed. The programmes are therapeutic and combined with experiential education; they are a mix between a therapeutic programme and the popular “survival training”. We combine one with the other. We present all the trends in a way that is suitable for the children.

We work in small groups, with emphasis on quality. When working with a child, you also have to involve his or her family in the therapy. We have very strong media coverage and all the media companies are on our side. Prior to the conference we will be holding a press conference.

Many of the children come from socially vulnerable families. The children were aged 7 and up; this year we have also prepared a group of 5- to 8-year-olds. The groups were made up of 25 children, which we have now increased to 35 children. We enable parents to experience a part of the camp for themselves; we prepare a lecture for them together with Marko Juhant. We are about to start implementing 8-week camps for families on our own property.

We mostly organise camps in the forest, along the Krka and Kolpa rivers. We are also introducing hills, alpinism and water activities. In the forest we carry out the Gozdovnik/Woodsman project. It is a holistic treatment of children, a sort of survival training that is suitable for such children. The child is aided by a holistic person – a pedagogue, therapist and survival instructor. After the camp we are completely exhausted; we cannot afford to fool around; a very serious and integral approach is required. It is a reciprocal process between the children and the therapists, in which the children can act as pedagogues to the mentors if they only know how to listen. The children who have undergone the process of Mavrični bojevniki have the potential to become top experts in psychology. Such experts are a rarity. You have to anticipate a situation before it happens; you have to have strong intuition, a sense of what is going on. Children notice things very well, both positive and negative emotions.

In addition to Gozdovnik/Woodsman, we also carry out the strategy game “Gladiator”, which can be carried out anywhere and focuses more on sport and movement. In secondary schools we also carry out the project “Hiška/Small House” to promote mutual cooperation; the project was initiated by Marko Juhant. Also very interesting is the project for secondary school students “Če ne veš, vprašaj/If You Don’t Know, Ask”.

A 14-day camp at Mavrični bojevniki costs €26,300, because it involves many experts from diverse fields, premium quality food, nutritionists, people who know all there is to know about medicine, etc.

Which experts do you involve in your work? They are experts in the fields of economics, special education, healthcare, sociology, qualitative and quantitative research in science, students from the Faculty of Arts, neuroscientists, dieticians, sport pedagogues (Ivo Drole) ... The mentors are psychologists, special education teachers, sociologists, social workers (e.g. Andrej Pivk); we would also like to involve the Faculty of Health Sciences. Our list of colleagues is created very spontaneously, whenever we come across people who feel the same way and possess the same energy; their professional education is not really that important; it is more about what we do in our spare time, what we are interested in... We are also starting to partner up with police officers, because many of these boys end up in a life of crime.

The children with special needs that we are working with feel things deeply. They are very intelligent, sensitive beings who cannot find an answer in the existing system. We are also perfecting and working on ourselves when we are around them. Children differ, which is why they need holistic treatment. It is important that different experts combine their knowledge and exchange ideas. We cannot say that all it takes is a cognitive approach or, for example, a diet. One child may benefit from a change in diet, another from a neurological approach, a third from homeopathy, a fourth from changing schools and a fifth from his mother and father patching things up.

How are the children and parents responding to this? The children and parents are thrilled, they like coming back. There is a need for such programmes in society. We are very pleased that the camps are fully booked.

It means the most to me that our work is yielding results in the children and parents; that the camps are instantly booked up, and that we receive bookings for a year in advance. If there were no results, the children would not keep coming back. It is very important that our activities have an actual impact.

Do you think that such a method of working with children (promoting non-formal skills in natural environments) plays an important role in the inclusion of CSN (ADHD) in society? Why? It has proved to be efficient in itself. It is an environment in which you can influence children more easily and teach them the social competences one needs in society. The natural environment is highly stimulating for children with ADHD. We retreat to the forest with the children, we learn something there, and then return to the urban environment. Forest pedagogy has great potential and deserves more attention in kindergartens and schools.

The children would undoubtedly have fewer problems if they spent more time in nature. The Dragotin Kette Primary School and the Puconci Primary School are very much in favour of lessons outside the classroom; they have even set up two outdoor classrooms. A small part of the curriculum programme should be connected with lessons outside the classroom, which would provide an opportunity for the Institute for Forest Pedagogics. Early treatment is very important, however, Mavrični bojevniki does not practise it. The plan of the Mavrični bojevniki institute is to create an educational environment. We are working with LILA, the newly-founded alternative school in Novo mesto, which will begin operation in September.

Tatjana Jakovljević

Slovenia

Date: 23th January 2017

Method: in person

Tatjana Jakovljević is a special educator in the development department of preschool and one of the major Slovenian experts in the field of SEN children development.

Why do you think that spending time in natural environments can be important for children and young people with special needs? The cause of the symptoms of developmental delay and developmental specificities (special needs), both in children and in adolescents with special needs is almost always neurological dysfunction, which, unfortunately, our education system and healthcare usually tackle from the aspect of the symptoms, i.e. the level of higher mental functions. The laws of the neurological development of children's and adolescents' brains clearly show that the brain develops in stages and becomes hierarchically organised, which means that the development of higher mental functions depends on the lower brain functions, and that brain growth takes place in critical periods and depends on the social environment.

Therefore, if we are looking at the brain of children with special needs, the cause of the dysfunction (the developmental specificities) at the level of higher mental functions (speech, memory, attention, concentration, visual and auditory processing, cognition, adaptive ability, regulation of emotional states, etc.) is often found in the lower brain functions, which develop the most optimally through the child's own spontaneous activity, the child's spontaneous movement and the child's non-verbal contact with the social environment. The key aspects of the above-mentioned ways to enter the development of lower brain functions are based on the neurological processes of sensory processing, on the maturation and integration of reflexes, and on the response to the facial expressions of the social environment (this develops the child's mirror neurons, brain structures which enable an individual's spontaneous development based on imitation of the environment, a spontaneous development of speech, entering social reciprocal interactions, adapting to the social environment, the ability to put oneself in someone else's shoes, empathy, social consciousness, adapting to change, etc.).

The most basic neural development systems are the vestibular, proprioceptive and tactile system. The above-mentioned neural systems of sensory processing are dysfunctional in almost all cases of children and adolescents with special needs. All three sensory systems and the primary brain functions develop spontaneously and quickly on uneven terrain, which in today's society is available only in the forest and in other natural environments.

The human brain has been evolving for millions of years in order to adapt to the natural environment, but in recent years we have completely eliminated all of the essential components of the natural environment (uneven terrain) from the development of children's brains, because our children are growing up in static positions, first in car seats and prams, and afterwards in static positions in kindergartens and schools. If they are moving, they are usually doing so on level ground and such movement is only rarely spontaneous; in most cases it is guided and structured. And then we ask ourselves why more and more children are having developmental and learning problems...

Recent findings in neuroscience clearly indicate an increase in the number of children with developmental specificities. If we approach a child with problems at the level of lower brain functions by “bombarding” the higher mental functions (this includes structured, isolated teaching or skills development by an adult while the child or adolescent is static), we activate the protective reflexes of the brain stem (the “fight-or-flight” response) and consequently bring about inhibition or delay in the development of higher mental functions.

I therefore conclude my answer to the question *“Why can spending time in natural environments be important for children and young people with special needs?”* by claiming that for children and adolescents with special needs spending time in natural environments is necessary in order to ensure the filling-in of the missing neural links and thus enable the spontaneous development of higher mental functions, depending on the spontaneous imitation of the environment (mirror neurons).

Furthermore, staying in a natural environment may stop, prevent and treat the increasingly common secondary symptoms of children and adolescents with special needs from the aspect of emotional distress (retreating into their own world, aggression, auto-aggression, dependence on audio-visual means, inability to regulate emotional states, anxiety, inability to adapt to a real social context, etc.), which are caused on a massive scale by structured, static learning, which is guided in all stages by an adult, and by the training of higher mental functions in connection with the growing exposure of children’s brains to audio-visual means (tablet computers, smartphones, computers, etc.).

Therefore, children, adolescents, parents, pedagogues, kindergarten teachers: the answer to all of the above is one’s own spontaneous activity in connection with spontaneous movement on uneven terrain and the entering into reciprocal relations with the social environment. Go boldly to the forest...

How would you explain or substantiate the benefits of, say, the learning of non-formal skills (cooperation, independence, motor skills, movement, communication, etc.) in natural environments for children with special needs? Our system bases the learning of cooperation, independence, motor skills, movement and communication in children with special needs precisely on “learning” (learning through adapting the learning objectives, adapting the learning situations, frequent repetition, visual support, the presence and guidance of an adult, and the structure of learning situations). This presents a neurological paradox. We cannot encourage or develop the aforementioned abilities in children with special needs through learning processes (this becomes apparent to the professional staff after every vacation, when the children with special needs return to kindergarten or school and have to start acquiring individual skills and knowledge from scratch...), but must develop the links in the children’s brains, which will enable the development of these abilities through spontaneous imitation of the environment and not through isolated “drills”. For this reason, we must possess neurodevelopmental knowledge of the laws of the hierarchical development of a child’s brain and knowledge about entering and developing brain links.

We should be aware of the fact that the basis for all of the above-mentioned non-formal skills is the processing of sensory impulses from the environment and from the body, and the establishment of self-regulation. Therefore, how a child’s brain detects, processes and links sensory impulses and plans the motor response (and carries it out) in accordance with the sensory

stimuli, determines the entire further development of skills, which are assessed in a child from the aspect of holistic development. Hence, it is our goal to develop and optimise the primary sensory systems, which are based on the vestibular system (it is located in the middle ear and connected with balance and the sense of gravity) that is developed by tilting one's head from the neutral position and shifting the body weight by tipping forward. For the purpose of developing the aforementioned sensory system we can take the child to therapy and buy expensive therapeutic aids and playground equipment, but in an educational process that is based on group dynamics and a pedagogical profession that does not possess therapeutic knowledge, this is often systematically limited.

However, if we continuously enable children with special needs spontaneous movement in natural environments, in connection with the development of self-initiative and self-regulation, and entry into reciprocal relations, and enable them to abandon stereotypical, repetitive, developmentally regressive forms of behaviour/functioning and the fixation with the pathological attention from an adult, we will develop the basic brain functions in the child's brain (in accordance with the child's capacities).

By doing so, we influence the course of holistic development and the development of the learning abilities of a child with special needs based on imitation of the environment (meaning that the child gains something from each educational, learning situation with regard to developmental progress), and abandon the development tied to developmental progress or the acquisition of learning skills, which is entirely dependent on isolated, structured and planned guidance with frequent and lengthier repetition by an adult in all segments of development and in all segments of learning, which consequently adds on emotional distress.

We must realise that there are many therapeutic approaches in the field of CSN, which are often founded on structured protocols because of their financing structure; these protocols are based on guidance, the implementation of therapeutic contents by an adult, and the marketing of expensive therapeutic aids/equipment. And those can be sold. We do not need licensed equipment to stay in natural environments; we do not need a licensed instructor and we therefore cannot conclude the reversible exponentially increasing cash flow... Perhaps that is why the system does not find this area topical from the aspect of developing therapeutic approaches. However, it is topical from the aspect of developing and maintaining mental health and from the aspect of developing a child's brain... Hence, this is our future...

Which category of children (intellectual development disorders, sensory integration, behavioural or emotional problems, ADHD, ASD, etc.) do you encounter in your work? The age of the children, the size of the group? Do you carry out educational activities in nature with them and what exactly do you do? Are they focused activities or are the children playing freely? In my work I come across a wider range of developmental and paedopsychiatric specifics of all ages (from new-borns to adolescents), both at the individual level and at the group level. The therapies I carry out are based on a family-oriented approach, which means that I focus on the child's primary family, in connection with therapeutic approaches that are based on filling-in the "missing neural links". During the therapeutic process, all of the families spend a great deal of time in natural environments (uneven terrain), and that time is devoted to the child's own spontaneous activity and to entering into social reciprocal relations.

You are one of the rare experts in Slovenia who also advises the use of natural environments for the development and teaching of children with special needs. What would you advise pedagogical

staff? How should work in natural environments with CSN be carried out? An important aspect of my work is imparting knowledge to the pedagogical staff regarding the neurological development of a child's brain in connection with natural environments, since the pedagogical profession has begun to realise that the current child populations are no longer able to implement the pedagogical approaches of recent decades. Such approaches are based on structured, guided teaching by an adult while the child is static. Professional staff has been reporting a drastic deviation in the child populations of the last few years in comparison with the previous populations; the same applies to the CSN populations who are increasingly correlated with paedopsychiatric symptoms.

Thus, on the one hand, there are children who are no longer able to enter structured teaching based on the isolated training of the higher mental functions and, on the other hand, professional staff that does not possess the appropriate neurological knowledge to help them to find different pedagogical approaches. It is therefore necessary that we think systemically about implementing the knowledge of the latest findings in neuroscience, which have clearly defined the role of the maturation of neural systems of sensory processing in connection with the child's own activity and with the entering into reciprocal social relations as the foundation for the child's learning and holistic development.

From the aspect of optimising brain functioning, working with CSN in natural environments should be carried out in a way that develops all sensory systems of neurological processing and triggers the integration of the child's brain (front/back, down/up, left/right) in connection with the child's spontaneous play, spontaneous movement and entering into reciprocal relations. It is therefore important that we learn about the neurological basis for the development of the brain functions that we want to develop in CSN. For example, the key role in the development of a child's speech is played by arm reflexes (opening and closing the palm, moving all ten fingers, gripping, intercepting falling objects, dragging, carrying, pushing, etc.), the vestibular system (balance and movement), sense of hearing and mirror neurons, which are developed by mirroring facial expressions and establishing joint attention (a child and another child or adult focus their attention on the same object, event, person, etc.).

All three of the above-mentioned segments can be developed continuously in natural environments. In the closed rooms of the education system (classrooms, gymnasiums and playrooms) the intensity of sensory impulses is often too high, which in the case of children with special needs often leads to the activation of the protective reflexes of the brain stem, consequently inhibiting the development of higher mental functions and learning abilities. Primarily due to the balance of sensory impulses, the natural environment is thus the only environment in which the brains of children with special needs do not switch on their protective functions and are capable of spontaneously establishing neural links that are the foundation for learning and developmental progress. Secondly, the natural environment and its properties spontaneously enter the basic neural systems that present the foundation for the child's development and learning.

Do you believe that such a teaching method has an important role in the inclusion of CSN in society? Why? Regarding the aspect of the inclusion of children and adolescents with special needs in society, we must first clarify the real social situation in this segment. In the contemporary system we have distinctly compartmentalised all segments of the external regulation of children and individuals with special needs. We have structured the entire continuum of education in the field of CSN (children with special needs) down to the smallest detail, basing it on the curricula and not on the hierarchical development of a child's brain and on the filling-in of the missing neural links. As a result, CSN are often provided with many opportunities for training their higher mental

functions during preschool education and schooling; unfortunately, they are often not given the opportunity to develop the foundations on which these brain functions could develop. This results in individuals who are often unable to develop the basic functions of neural development, which enable their inclusion in the social environment, namely the ability to self-regulate affective states and adaptive behaviour in a real social context. Without the above-mentioned abilities, individuals develop into dependent personality structures that depend on external regulation and external guidance. And consequently into unemployable personalities. For instance, let us take a look at autism. The USA allocates most of its financing structure in the field of autism to adults with autism. Hence, despite its perfected education system, which in the case of autism is often based on structure and visual support, the final product is unemployability.

Chris Ball

By phone/face to face: e-mail questionnaire

Contact number: 07503218722

Address: 32 North Mossley Hill Road, L18 8BP

Email: cabetc@aol.com

Chris is an outdoor educator with drama

Can you tell me why you think it is important to engage children and young people with SEN in the natural environment? Learning should take place everywhere and all youngsters especially those with special needs benefit from working al fresco. The natural environment can also be a source of inspiration for cross curricular work.

Are there any academic frameworks or models that you think help to explain the benefits for young people with SEN of non-formal learning the natural environment? None that I am aware of.

Can you tell me about your role in relation to working with children and young people with SEN in the natural environment? Leading drama sessions involving den making, and also devising narrative dramas in castles, on water and on beaches.

For the sake of this research we have adopted 11 categories of SEN. Which categories of children/ young people have you worked with in natural settings? Mainstream and special needs working together. These have even involved children in wheelchairs in searching for dinosaurs from a high hill top overlooking an overgrown valley which was our 'lost world.'

Can you tell me about some examples of working with these groups: In the above example the pupils in wheelchairs were given walkie-talkies which enabled them from their hill top viewpoint to guide children in the valley below towards their destinations? When we did a project on North American natives we set up a tepee from which the children initiated a search including canoeing on a lake towards an island where they consulted the 'Great White Spirit'. They practiced canoeing skills beforehand in JMU's pool.

The group:

- **Was this a group of children/ young people from a mainstream or SEN setting?** When we have done big outdoor projects we have worked with SEN and mainstream pupils together so they have supported each other.
- **What ages were the children/ young people young people? How many were in the session/s/each group?** Numbers for these big projects have involved between 60 - 80 pupils and staffs from their schools. The age ranges have been from infant to 19.
- **Was this a single gender group or mixed/what ratios of male to female?** The ratios were roughly half m and f.

The sessions:

- **Who led the sessions?** Myself and colleagues worked collaboratively, though we chaired planning sessions and provided support materials.
- **Who else worked with you during the session supporting the children/ young people? Were they experienced in working within this setting/ were they trained?** The staff were trained and mainstream staff met with SEN colleagues in their schools to acclimatise and to plan.
- **How many sessions were there?** Big projects lasted 8 weeks sometimes.
- **How many groups have you worked with in this way?** About 6 big projects involving large numbers

The site:

- **Can you describe the setting in which you worked with this group, was this the same setting for each of the sessions/ was it suitable for purpose what was good/bad– what could be improved?** See above
- **What time of year did you work in this area, were there any positives or negatives of the time of year when the sessions took place?** Generally spring/summer but we dressed for all weathers – It is U.K. after all!!

Approach to learning:

- **Was it the intention for the sessions to be formal/informal/ non-formal learning?** They involved active, exciting approaches to literacy, numeracy, history, science geography etc. We don't feel that formal and informal/creative education are mutually exclusive.
- **What was the key focus (outcome) of the sessions?** A person with a problem eg. How will we stop them building a railroad through our sacred lands? How will we conserve the dinosaurs and stop the hunter killing them (Major Killthelot)?
- **Did you have a detailed plan for sessions or are they more free flowing?** We planned the first session and we planned the next sessions out of the pupils' responses.
- **Did you need to adapt/design activities to meet the needs of your group, if so, how?** We enlisted the help of mountaineers to get wheelchairs to base camp etc. We tried to involve as many young people as possible in all activities by getting the support of college and university teachers and students.

Practicalities of running sessions:

What materials were needed in order to run these sessions? What was the cost of running sessions? How was it funded? Tents, tepees, hired canoes, dinosaur puppets, camouflage nets. We borrowed from Army and play groups and had various funding packages from Arts Council, Princes Trust, local authorities. It was some time ago, however, so these funding partnerships are very unlikely now!

Review

- **How did the children/ young people respond? Was this feedback similar from all children/ young people?** Unbelievable response all round from all staff and pupils. That's why we did

so many projects over the years.

- **Who benefitted the most/least for the sessions?** Everyone
- **Did staff outside of the sessions give any feedback about the response of the children/ young people following these sessions?** Yes – all positive
- **What are the barriers to this type of approach?** I expect time, lack of funding and curriculum constraints would mitigate against this sort of project now.
- **What would you do differently?** Nothing, but we improved the process each time we worked on projects especially with support from other agencies like colleges.
- **In summary, what were the key successes?** Cooperation, creativity, excitement

Sefton Booth

England

Interviewee: Anne Dick

Can you tell me why you think it is important to engage children with SEN in the natural environment? Because it is an environment they don't always encounter. A lot of our pupils live in inner city environments, they don't encounter weather, they don't encounter rough walking ground, or wild animals, or even farm animals on an everyday basis, so they get to engage in a totally different environment and they notice things that excite them, like sheep which they don't normally see. So I think it is really important for our kids to get that sort of experience.

Are there any academic frameworks or models that you think help to explain the benefits of young people with SEN accessing outdoor education? I think a lot of it helps with problem solving, and it helps with independence type stuff which then hopefully they'll be able to transfer some of those skills to some of the maybe open Awards that they are doing in other areas for example we do like horticulture and there are a lot of open awards that the children can access with things like that so they understand about plants growing and caterpillars eating things and things like that and the skills of actually looking at organising things and also being safe in that environment

I suppose some of the models like the open awards that we might do, I suppose we are a formal setting but in actual fact a lot of those models could be done in a non-formal setting. Yes, I agree, but to be honest with you, we could even write our own, certainly with things like AQA units and accreditation we could ask our person in school who looks after that, if we said we were going to do things like a countryside walk, there are AQA units for that, which involve things like preparing for the walk, ensuring they have the right clothing, checking that they are safe, checking how they are going to get there. There are all those things there which are all formal qualifications but obviously it's all about preparing them for being organised and looking after themselves a little bit, so it is all about improving their independence skills.

Regarding the group, was the group of children that you have worked with from a mainstream setting or an SEN setting or have you worked with both? Just an SEN I have worked with.

And the age group you have worked with? Post 16.

Was there any kind of single gender groups you work with or were they mixed? What was the ratio off male to female in the groups? Usually we have more males than females, they are nearly always mixed gender groups and the reason for this is that the population of school tends to be more boys than girls, however, this year for the first time ever I have got a group where there are five girls and two boys, so it is a complete reverse, but that is unusual because the general population of the school is more boys.

What was then the level of attendance for those sessions? Is it consistent throughout or do you find that medical needs etc. get in the way, or is it mostly consistent? I do find mostly it is consistent yes, because we are doing it in Post 16 we can use time within the school day. If the child does have a medical issue, it will be maybe a block they'll miss because they have had to go into hospital or the odd thing you know when they are sick which is just a general thing really and nothing major.

Tell me about the sessions? Who has led the sessions? I lead the sessions

And who else has worked with you during the sessions supporting the children? Were they experienced in working within the setting of outdoors? Were they trained, or is it that you've been training with that person or have you just found your way? Well, the people that work with me are generally teaching assistants from the school and they may not have had any training formally and we kind of find our own way around things but they've all got an interest in what they are doing and are happy to work in that environment, and are happy and obviously very knowledgeable with the pupils, with the young people and that is what I feel is more important is that the pupils feel supported and we can judge each situation as it comes up and like we always have to do in an SEN setting, you risk assess constantly, and when they come up to do something they go "can I" and you look at it and you go "no, I don't think that's a good idea" or "that's a brilliant idea, let's go for it!"

So, it is always understanding the clear level of support I suppose? Yes....

Integral to be able to work as outdoor education? Yes.....and also when we go to the outdoor facility where we do our residential, we access activities there with staff who are extremely well trained in the activities they are delivering, so they are the ones with the kind of outdoor education qualifications and we are just there really to support the pupils so for example if we go canoeing or something like that, they then take charge of the sessions and we are there just to support the pupils.

So how many sessions are there would you say that you do? How does it work, duration of weeks or frequency during the week or length of the session? How does it stack up? Each child that is involved with Duke of Edinburgh will have at least two hours per week. Now, the activities that we do throughout the year can vary from being based in the classroom if we are doing a skills type thing, being based outside doing things like walking or what have you so it is kind of spread out through the year, but it is every school week, there may the odd session we miss because of timetabling issues or other things happening but we are definitely up to about 35 weeks per year that they are involved and will have a two hour session of doing something connected to the Duke of Edinburgh

How many groups have you worked like this with now? I have been doing this now forit must be at least ten years...and I have got 2 groups this year, so we are up to 11 different groups.

Now about the site that you used? Can you describe the setting in which you worked with the group? Was this the same setting for each of the sessions? Was it suitable for the purpose, what was good and bad and what could be improved?

If I talk a little bit about the residential, this takes place at an outdoor pursuit centre that is specifically designed for pupils with special needs, whether they are physical difficulties, behavioural difficulties, learning difficulties whatever. The building where they are based is absolutely fabulous, it has everything you could possibly need for a child with any type of disability, and we use their outdoor education facilities. We don't actually stay in the building, we stay in another building which is like a bunkhouse, this is owned by them but it does have adaptations for wheelchairs, a wet room, but it also has other things that you would consider alright for non-disabled people.

So to a certain extent the children have to kind of adapt themselves a little bit to being in a kind of "mainstream" environment but there are facilities there, should we need them for specific pupils,

and it is in, literally, the middle of nowhere. The nearest building is a farmhouse which is probably about half a mile away and we are just surrounded by hills and sheep that wander about, horses that appear from nowhere, there's no fences to keep them in, and we do walk around and explore that local environment as well as partaking of the activities at the centre, so they get to go "well what's over that hill?", "well what's up there?" and we come across things like a group of cows standing around and you go what are the cows going to do, how are they going to react. We go there and we can use either the bunk house, the children can sleep in the bunkhouse or they can sleep in a tent, depending upon what level of the award they are doing, but the backup is always obviously if we have like a major thunder storm or something and the tent gets washed away, we've still go somewhere for the children to sleep. So that is safe, you know nothing would ever have to be abandoned unless the whole hillside got washed away.

So what time of year do you work in that area? And with the time of year that you use it, what are the positives and negatives of that time of year. We have been at various times of the year from Easter through to July and we have even been in September. We try to go when the weather is a little bit better, but nothing is guaranteed obviously when you live in Britain. This year we are going in June, and the reason for choosing this is that it fits in with other activities within school. It is the last half term of the year, and all the exam stuff and qualification stuff should all have been sorted by then, and so there is not so much pressure on staff when I go to them and say this child is coming away with me, so you have lost him for 3 days or five days or whatever.

So the bonus is that the weather tends to be a little bit better...the flipside of that is that sometimes you get invaded by midges, and there is a particular thing that we used to do called a gorge walk but last time we went there were so many midges that the children all came out unfortunately looking like they'd all got measles! So we have said we can't do that at this time of year; that needs to be done when the weather was colder. We have been when literally there has been snow on the high ground and the children just love it and they still love it even though its cold.

One of the positives is that in the building there is a wood burning stove so the children have to learn how to chop the wood and they do that and even though sometimes I have my heart in my mouth watching them with the axe, they do it, and some of the children have never seen a real fire, so that again is a wow for them, you know they live in houses with central heating and they've never seen a flame, and they have no idea how to light a fire, how to clean up from a fire, what happens when you put a load of wood on a fire, where does it go, what happens to it, how does it get hot, again loads of experiences for them, you know and making decisions about is this log small enough to go on, do I need to chop up more kindling etc., and we talk them through it and they all eagerly watch, and then we have toasted marshmallows, so that's another thing.

Was it the intention for the sessions to be formal, in forma, non-formal learning, or could you give a definition of these in terms of approach to learning? Some of the sessions are formal in like when we are doing a skill section they have to listen because we are teaching them something that they need to do in the correct way, and they need to do it safely, so for example this year we have taught them to use an electric sewing machine, quite a difficult concept for them to get their heads around, so it is done in a formal setting.

But when we are outside its much more informal, and that is good as well because it is a different way for the children to learn, you know they ask a lot more questions, they don't rely so much on me just giving them information, they explore things for themselves, they find things and they generally behave really well, because if they want to go and run around for a bit you know, they

can because we are in that environment where you have got the freedom to do that, so long as it's safe obviously we don't let them run around on the top of a cliff!

So inside, you know it is quite clear what you are asking them to do, for example, with the sewing machine, what are the outcomes then in that outdoor education? What would be an example of an outcome or a key focus of the outdoor session? The outdoor stuff is about exercise really so it would be to participate in a walk, it would be something as simple as that can be your starting point and then you can put all sorts of things in there like how many different trees can you see, how many different animals can you see, again it depends on the time of year obviously, you know when they can identify the leaves.

There's all kinds of stuff that you can put into that as a learning outcome which improves things like their communication skills, their observation skills, their team working, you know you can send them off - at one point I sent them off to collect pine cones, said off you go...gave them a couple of carrier bags, and they had to kind of work together to try and fill a bag with pine cones. They had to go looking for them, they had to know what they were looking for, they had to organise themselves, you know, who's going to hold the bag, that sort of thing.

So I suppose you could say it becomes sort of a reactive educational setting because you are reacting to the environment at that moment, which cannot be predictable, and it is the same or similar for the child of which how they react to that environment at that moment, and the lesson comes out of what we engage with. Yes, yes, the outcome is really by, well the outcome is what the child gets out of it, and that can depend on what you put into it obviously so you can go into an outdoor environment and go I know that there are at least 12 different types of trees in that forest so I want to see how many of them can actually notice those different trees, so you can put the maths in there, you can put anything in there, you know collecting leaves and they could come back then and save them in a scrap book, look them up in a tree identification book, you can bring all sorts of things into that which can further their education in a more formal way, they won't realise that that is what they are doing at the time

It's a very different pedagogy; wholly different to being in the class room where it is very directed learning, where as soon as you go outside it almost becomes a non-formal learning setting of which then you teach in a wholly different way? Absolutely, and I think as well it is a very practical way of teaching, so the children who are kind of your kinaesthetic learners will get a lot more out of that than from sitting in the class room listening to you talking, or even watching a video or something like that because it is very hands on, and it is very you know, touchy feely.

And very real too as opposed to something in a formal setting, where it is very imagined and that for our learners can be difficult? Yes, yes, that can be very difficult, exactly. You know you can just, you know, take the lesson of in a completely different direction if they discover something like say a hedgehog or something like that, you know you were planning on doing trees, but suddenly there's a hedgehog there, so you can have a whole discussion about you know where the hedgehog lives, how do you think he survives,, what do you think he eats etc., and it just gets them recalling knowledge they already know and just looking at things can do that so you know it is amazing.

So can I ask would you, do you, or do you have other teachers who teach in the outdoors, do they have detailed plans for the session, or are they more free flowing, or are they a mixture of both? How do you do it? I don't have detailed plans of my outdoor stuff, no, I have a rough idea of what I want to do and what I want to achieve but I have found that the children can achieve learning outcomes just by observing what they are doing. If you have a rough idea in your head, or a rough

plan, ok say for example we want to collect leaves from the 12 trees that I know are in this forest then that can be done but the way you achieve that can be targeted to individual learners, you could say to some students or groups of students “there are 12 different trees in this forest, go and see if you can find me 12 different leaves “, or you can say to them in a much more open way “are the leaves on all the trees the same, let’s have a look at them”

So essentially you are adapting and designing activities to meet the needs of the group? Yes you can differentiate the activities

And they are differentiated sometimes by plan, so I know this group will need this and I know that this group who are going out at the same time will need something else, or while you are there, it will adapt as you see how they react, and what they know Yes definitely

Do you think that because you have been doing, for example, Duke of Edinburgh, and going into the outdoor education system, outdoor non-formal learning, do you find that things come more naturally to you? How do you approach differently now from when you first started? To be honest with you, part of my training, because I did a science based training course, was about taking pupils into the outdoor environment and one of the tasks we had to do was to go through the science national curriculum and decide where that lesson could be delivered outside of the class room, and basically we came to the conclusion that apart from organs of the human body where we would have to go to a mortuary, we concluded that the whole curriculum could be taught outdoors. So from that I kind of look at things in a different way and try never to miss an opportunity to teach them something, whatever it happens to be, whether it is about counting things, looking at things, whether it is about communication, reading signs, what do signs mean etc. I try always to involve that all the time, so I may be a little different now in that I am more experienced doing it, but I think it was an expectation I always had when I came into teaching, that you should be able to do it.

And you wouldn’t say that was exclusive to science? No, it was just because that was my subject, I am sure that if I went through any national curriculum I could pick out a lot of things that could be taught in the outside environment, and I do that now that I am working in SEN, I don’t just teach science, I teach right across the curriculum, so I use the opportunity of being outside to teach other things as well.

Is there any subject that you think could not be taught outdoors, maybe for example ICT? No, because even with ICT you could do things like video things, take photographs of things, you can manipulate the photographs, you could do all sorts of things like that, and there is a lot of ICT equipment now that you can use away from the class room, technology had moved on, you know things like you can get the internet on your phone when you are anywhere in the world and so there are devices that you could take out with you and look at something like, for example, Google earth and go let’s find where we are, and look that is where we are standing. So things like that, and I honestly think there would be very little that you could not teach in an outdoor environment.

So the question is then, why do you still have a class room? Because it is somewhere to store all the books!

Talking about the practicalities of running a session, what materials were needed in order to run the session? Very little, very little indeed, just the children themselves really, and providing they are in suitable clothing, so for example if it is raining they do need to be wearing a coat otherwise they will get pneumonia, or sensible shoes that way parents don’t complain when they come back with their designer trainers covered in mud

So it is about access then really? Yes, that would be the only resource we would need, would be the minibus to get us to places that are wilder than where we could walk to straight from the class room

What are the running costs of the sessions and how do you get money in if you need it? The running cost of the session basically would be the cost of me and the other staff, paying our salary for that time, the cost of the minibus that we have used. When we are away on the residential it is the cost of those activities and the cost of where we are staying, as well as food etc, and what we do with that is we fundraise all year round through various activities that the young people help us with and we save up and we do ask parents to contribute to some of that residential cost. So yes, there is a cost but if we were accessing something that was literally in our doorstep we could do that every day for free, or for no more than it would cost to have the children in the class room.

We are fortunate that in a school setting we are able to fund it all but if it wasn't for school it would get quite difficult, and then secondly I suppose, it is back to that city versus non city because if we had for example, no minibus it would be limited to the gardens. Yes, it would be limited to the gardens or where you could reasonably walk to within the session time, so that would be very local parks which may not have any kind of wild areas, they could just be a grassed area with a playground or something like that

Would you feel limited then? Absolutely, very limited. I don't think we could do what we do without having access to the minibus really, so we can cut down the transport times and we are very lucky in this area in that we have some lovely outdoor spaces that are within say half an hour's drive of where school is, but without the minibus they would then become inaccessible if we had to rely on public transport it would take us all day to kind of get there, and we maybe would have half an hour there and then we would have to be coming back, so the minibus is a major expense in that, but without that we would be very limited in what we could do.

How did the children or young people respond? Is the feedback from all the children the same, is it different? What was their response to outdoor education? Some of them love it and some of them hate it, it is as simple as that. I have only had a few pupils who after coming away have said "no I don't want to do it again " and some of that is about the difficulty of being away from their parents rather than the activities themselves. And while they have enjoyed the activities they have not liked that you know mum's not there to cook their tea for them or something like that, you know they have kind of been challenged in their independence like life and they have not really liked that. I can only think of one child that has said no they don't want to do it again, and that is absolutely fine because if after a little bit of persuasion they don't want to go back then that fine, but it is that thing of being away from home as well as being in the outdoor environment, if it was something that could be done where they go home every night, they would probably love it.

There are some children who would do it all the time, you know I have had young people who have said "can't we just stay here, I have absolutely loved being in the tent " and just want to spend all day running around the hills, because they love that kind of thing, and some of that they do with their parents, and their parents have brought them up to be a little bit outdoorsy and will take the time to take them to say the beach, or Formby or somewhere like that where they can spend their time running and what have you , and others are "well I enjoyed it but I will be glad to go home" but would still come again and still engage again.

So it suppose it is impossible to say who has benefitted the most or the least, you couldn't set a group that wascan you think of a group that would not benefit? No, I can't. there are some

young people who would find it difficult, but that doesn't mean they will get no benefit from it, because they still have had a different experience, and every experience you have in life will give you a benefit in some way, in that actually that wasn't that bad. You could look at a group of young people and say you know they have never been out of the class room, they have never been out of school, they have never been whatever, and yet it may be difficult to do that with those young people, to take them into that environment, because everything will be strange, everything will be different, they won't know what is happening necessarily, but when you come back and then you go again , then they have got an idea of what it is all about, and luckily in this school out pupils go out from a very young age, in to the community, into other environments as part of their learning experiences so by the time they get up to me in Post 16, they do know when I say we are going to go walking in the woods, we are going to go camping, things like that they have a good idea of what that is going to involve.

I pretty much like the idea of experience because I remember working with an Oily Cart group and I remember in particular one child who was going through an experience, it was like a roman bath in the pool, and in actual fact this particular child really didn't like it and was getting quite upset and we were going to stop and move the child away when the leader of that particular group said no, that it was important that child has the experience of that feeling , and I think that can be key to some outdoor activities, it may be difficult but we will face that difficulty..... It is important for the young person to know that you know what sometimes life can be a little bit difficult and sometimes there are things in life that you have to overcome or you have to endure to get that cup of hot chocolate at the end of this session, I am going to have to put up with walking through the rain and the wind , sleet or whatever, but do you know what it is worth it, it is to have that sensory experience of the weather and to see things around them. And then you know isn't it lovely to be warm after you have been cold, just having that experience and understanding that, which is key.

So changing tack a little, how about the staff outside of the session, do they ever give any feedback about the responses of the children, if children leave your D of E session, or outdoor education session and then do staff ever come to you and say well, John Briggs here either liked or disliked? The feedback that I get is generally very positive, the children have gone back to their staff and said oh it was really good, I loved it, loved every minute of it, or we did this or I liked that and because we take lots of photographs of things then generally we will take their staff to see the pictures and they can show their staff "oh look that's me"... so the feedback that I get from other staff who aren't involved with the activities is that the children enjoy it

So staff have not reported that so and so has come back not ready for my session? No not really, because it is a half a day session from first thing until lunch so there is a natural break before they have to go to another sessions.

So a straight questionwhat are the barriers to this type of approach? Some of the barriers are things like money, that the environments are not easily reachable, maybe the staff are not confident taking the children out, there may not be enough staff available, because obviously when you are outside you have not got the children in a confined space so you do have spread out a bit more, so that may involve you needing more staff than you would in a class room and also some staff don't feel confident without some training in doing that, and then some people would find the whole thing far too risky, because of all those things that can go wrong but if you plan beforehand, and you will never plan for every eventuality, but you do your risk assessment on the pupils and on the environment that you are going to, so if you know that you have a pupil that can become difficult, behaviour wise, you plan should that happen, how will we deal with it when we are in the middle of the woods.

So that is what we would say is a risk assessment, has there ever been a situation where you have said, too much risk we are not doing it....or has there ever been a risk assessment where you think this won't be signed off but I think it is safe?

No, basically. There may be some activities where I would go, no I wouldn't do that but they would be things that I personally probably would struggle with, but by making sure that the staff that are involved with the real high risk activities, the actual outdoor education stuff are very well trained and I know they have extremely good equipment, and they can adapt everything to suit any child, that makes that safe.

The places you go to visit you risk assess that, you look at that and you go yes ok that is great, like I say you don't take them for a walk along the edge of a cliff, you just don't do that! You know that is too risky, We have had children who have done you know great big long zip wires and things like that and they have loved it, you know they absolutely love it, and I can't think of anything really that I have said this won't be signed off on (due to risk) because it is all about a risk assessment really is not all about this is dangerous, a lot of the things we do can be dangerous if they are approached in the wrong way, so the risk assessment is about looking at that danger and what do you need to do to minimise it, and as long as you do that properly there should not be a problem. Even something like swimming which everybody does loads and loads, yes a child can drown but if you have done the knowledge of making sure you have people in the right places, making sure you have someone with you who can do the life-saving bit you know all that, it is bringing all that in to minimise the risk of the child actually getting injured, and that is what it is about.

So, what would you do differently? I would do more of it! Given the opportunity I would do more of it. And I would take the kids away for a month!!

So in summary what would you say is the key to your success? Enthusiasm I think really, and that the children really do enjoy it, and picking the right activities for them to do, that is really the key, to know the young people and know that they will enjoy that

But also, some of the successes have been where some of the children have been a little bit hesitant and then go through it and go "wow, that was brilliant" for them when you see them realise that they have been successful in doing something , they have achieved something that maybe they never thought they could do.

And that is something that you can get in abundance with immediacy with outdoor education that you might not see as often in an indoor environment? Yes, exactly , when you see a child who looks at something like a climbing wall and goes 'I will never get up there, I can't do that ' and you say to them yes you can , just give it a go...and before they know it they have reached to top, and you say see I told you, you could do it and they are like "wow I did it" and that happens immediately whereas teaching them self confidence in the class room they don't get the immediate thing of that is a huge challenge and they have just literally climbed the mountain !

Is there anything else we have not covered or anything you want to say? Yes, just that I wish more young people could be involved in outdoor education!

James Thacker

England

The following is a summary of the conversation With James Thacker, mountaineer

The value of Outdoor Education for young people is huge in my mind, the difficulty come in measuring the outcomes in my experience. But anecdotally whether SEN, or mainstream, taking young people out of their comfort zones a little has got to be good. Simply because risk is part of life, whether it's a business start-up, embarking on a new relationship or base jumping off a bridge. We are faced with physical and psychological risk every day and the outdoors often has the perception of risk when actually the real risk can be mitigated/controlled to an acceptable level.

As for models, I am no educationalist but the Kurt Hahn philosophy, although dated give a good insight.

Justin Farnan

The Lake District Calvert Trust

Little Crosthwaite
Keswick
Cumbria
CA12 4QD

Tel: 017687 72255

www.calvert-trust.org.uk/lakedistrict

Can you tell me why you think it is important to engage children and young people with SEN in the natural environment? Discussed mainly what was in the article. Please see attached article written for SEN magazine which answers most of these questions I think.

Are there any academic frameworks or models that you think help to explain the benefits for young people with SEN of non-formal learning the natural environment? This is more relevant to the work the schools do prior to their visit. We are working up a case study now addressing some of these points, also to appear in SEN magazine, but this won't be ready until the end of March.

Can you tell me about your role in relation to working with children and young people with SEN in the natural environment? See above

Can you tell me about some examples of working with these groups? We have a range of participants from schools and will be dependent on the school's intake and specialisations

The group:

Was this a group of children/ young people from a mainstream or SEN setting? Each school group will be a different mix of abilities. We only really deal with SEN groups from specialist SEN schools and would recommend that a group from a mainstream school (with a small number of SEN pupils in the group) may be better served going to a more mainstream centre. As a result the pupils will be a range from very ambulant with mild learning difficulties / Asperger's though to very profound and complex multiple needs.

What ages were the children/ young people, how many were in the sessions/each group? We take pupils from primary school (from c7) up to young adult at tertiary college (c21) and the ages will depend on what year group the schools bring to us. We run activity groups from between 6 – 12 people (including teachers / carers) so a school bring a group of (say) 30 attendees would be split into 3 x 10 per activity group.

Was this a single gender group or mixed/what ratios of male to female? Will depend on the makeup of the groups the school bring. Supervision ratios will also be dependent on the needs of the children, but since we don't offer care support these ratios will be set by the school attending – as long as it fits the 6 – 12 participants within each activity group.

What was the level of attendance for these sessions – was this consistent throughout? As per above, minimum group size is 6, maximum 12.

The sessions:

- **Who led the sessions?** Each activity group will have a dedicated instructor provided by us who will stay with the group through the whole length of their stay. Through the course of the week, for activities that require more than one instructor (ie. sailing) we will provide additional instructors for those activities. The school will provide teachers / support workers to provide care support and supervision of the pupils. These teachers / support workers take part in the activities as part of the activity group
- **Who else worked with you during the session supporting the children/ young people, were they experienced in working within this setting/ were they trained?** Our instructors will have relevant activity qualifications as well as safeguarding training
- **How many sessions were there?** Schools tend to be with us midweek arriving on the Monday afternoon and leaving on the Friday morning after breakfast. In the evenings, they have full use of the centre (supervised by their teachers – not our staff) such as the pool, sensory room, games room and sports hall. For each of their full days at the centre they will do 1 activity in the morning and other in the afternoon before returning to the centre for their evening meal at 6pm.
- **How many groups have you worked with in this way?** All structured along the same lines.

The site:

- **Can you describe the setting in which you worked with this group, was this the same setting for each of the sessions/ was it suitable for purpose what was good/bad– what could be improved?** Our centre is self-contained with c 50% of the activities taking place onsite (such as our indoor climbing wall) with c 50% taking place off site (such as sailing or horse riding) taking place at various locations in and around Keswick with us providing transport. All of our activities and all the equipment used is suitable for a range of disabilities and specialist equipment is used as required.
- **What time of year did you work in this area, were there any positives or negatives of the time of year when the sessions took place?** We work all year round with the exception of 4 weeks of late December / early January.

Approach to learning:

- **Was it the intention for the sessions to be formal/informal/ non-formal learning?** See above / attached. Learning goals and objectives are set by the school, not us.
- **What was the key focus (outcome) of the sessions?** Each school may wish to develop different aspects, but all are looking to develop pupils' sense of self-worth, confidence, teamwork, independence etc. as per the attached article
- **Did you have a detailed plan for sessions or are they more free flowing?** Activities and schedules are discussed by the school with our instructional staff before their arrival based on the needs of the pupils and the learning objectives as set out by the school. We have a range of activities that can be done as part of a residential stay, more details here.
- **Did you need to adapt/design activities to meet the needs of your group, if so, how?** We tailor the activities dependent on the abilities of the group.

Practicalities of running sessions:

- **What materials were needed in order to run these sessions?** All relevant equipment is provided by us, with specialist equipment (such as hoists etc.) already in situ.
- **What was the cost of running sessions?** Price per person can be found here <http://www.calvert-trust.org.uk/schools/bookings-availability> with all accommodation, catering and activities included in the price.

- **How was it funded?** We underwrite the cost of running the centre by c30% through charitable donation, with the remainder coming as course fees paid by the school. They may have a range of funding options for their contribution – pupil premium, parental contribution, general school funds, fundraising at the school, etc.

Review

- **How did the children/ young people respond? Was this feedback similar from all children/ young people?** With 3,500 residential visitors coming through the centre each year, we don't have specific individual feedback; however the school may track / measure the success of the visit (individually or as a group) against their own set learning objectives.
- **Who benefitted the most/least for the sessions?** Will depend on the group.
- **Did staff outside of the sessions give any feedback about the response of the children/ young people following these sessions?** We get general response from all guests on behalf of their group on the success of their trip and their satisfaction with the service we have provided, but not by individual attendee or individual activity
- **In summary what were the key successes?** We have been running for 40 years with a high volume of repeat business from schools, so it is a proven model of success.

Is there any written documentation supporting this work? – See attachment and above.

Dejan Sotirov

Slovenia

Founder and president of the Institute Rainbow Warriors (Mavrični bojevniki)

Date: 13th February, 2017, personal

How are you organised, what do you do? I am active in two areas. I run the institute Mavrični bojevniki [Rainbow Warriors], which organises camps for children with ADHD; I also hold counselling sessions for pedagogical staff and students at primary and secondary schools in Slovenia. I give lectures to teachers about the modern approach, about who they are, and about why they have to change in order to achieve results.

The institute Mavrični bojevniki [Rainbow Warriors] was established only a month ago; it had previously operated as a society. All of the events will be taking place under the auspices of the institute, which will be operating in Novo Mesto and Ljubljana, while users will be coming from all over Slovenia. The Expert Council is made up of Dejan Sotirov, Rihard Cerk, Marko Juhant, Lučka Sešek, Marija Müller and Maruša Lamut. Until now we have been operating mostly on the level of a gainful activity, by following our instincts, but have now outgrown that framework and need a more serious form of operation. Mavrični bojevniki carries out various programmes that have recently been protected, and a new website is being set up. Our approaches are different, but they are not enough. What is important is who is carrying out the activity.

I would like it very much if individuals in Slovenia would cooperate more. A prerequisite for cooperation is that I create the same energy with the person that I connect with him or her. We will be holding a national expert conference on 24 February on the topic of ADHD and on the topic of children with behavioural disorders, which will provide an opportunity for such cooperation.

Why do you think that spending time in natural environments can be important for children and young people with special needs? The results are evident in the fact that we worked with a child in the office for three months and afterwards took him outside and achieved the same effect in just one weekend. Nature has a positive impact on people in itself; it neutralises many things. With the right attitude everything starts to function. You cannot compare children in the countryside to children in towns; it is obvious that those in the countryside come into contact with nature and keep themselves busy. It most certainly affects their interrelationships, their interaction. I advocate a creative learning path. I say to children: "Change something in nature. Can you make a bunker out of bushes? Do you even climb trees? Do you know what a walnut looks like?" Nowadays, children are no longer spontaneous.

Children accustom themselves to the natural environment differently; they relax in it and many other things occur in the process. The survival training we are practising is more than just an interesting weekend; children learn the skill of survival. They acquire competences, the self-confidence that they can succeed in something. Also very important is the father-son relationship, something that the participants in our camps are greatly lacking. Our society lacks strong male figures. The pillar, the father model which is missing in our society is important. Boys need the role model of a real man, of an authority, of a person who is daring and just.

The Gozdovnik/Woodsman camp, which is organised by Mavrični bojevniki, is the only camp in Slovenia intended for children with ADHD. These children are constantly in sessions with special education teachers and have great difficulties. In their case, the child-mentor ratio must be close to 1:1. There are 40 children and 35 adults at the camp and in the end we are completely burnt-out. There are suicide attempts at the camp, brutal fights, etc. Every fifth child there is taking pills, antipsychotics. We are the only ones in Slovenia who are working with such children.

So far, no proper research has been conducted in Slovenia in the field of ADHD. We are currently conducting a survey in kindergartens, schools and child development clinics. Allegedly, there are about 5% of such children or 2 per class on average. The camp is also attended by dyslexics, children with Tourette's syndrome and those with autism. At each camp there are 3-4 children with autism in every term, which require one-on-one mentoring. We wanted to separate the camps by diseases, but we have decided against it because they are yielding results even though the children differ greatly. 90% of the users have ADHD, which is why we will continue to focus on such children.

The area of cerebral palsy and Down's syndrome is currently not covered in Slovenia. This is evident from the response from parents. Also very topical and unsolved are eating disorders, Internet addictions, etc. Mavrični bojevniki is not interested in the theories as to why such diseases occur. We are focused on the children's advantages; we look for the positive in children. These children have many talents, which must be highlighted.

The mentoring team also includes people who lack any special schooling but who have rich experience and whom the children accept. One third of the mentoring team is made up of adults with ADHD, including former addicts, schizophrenics and the disabled. Quite a few of them are hyperactive, as am I. And that works, because we base our work on our own example. Such people are capable of reacting splendidly in crisis situations, often better than people with degrees.

How would you explain or substantiate the benefits of, say, the learning of non-formal skills (cooperation, independence, motor skills, movement, communication, etc.) in natural environments for children with special needs? In nature no one says: "It's dangerous, you can't do that", instead we say: "Help me to make something." In nature children learn through their own experiences. We teach them skills, such as intuitive archery, airgun shooting. By doing so, they train to focus, which directly influences the brain. We are interested in their reaction, in making them see what they are capable of. The children divide up the roles and tasks. They share the feeling of being able to accomplish something, that they can manage with something they have found on their own. We give them challenges in the forest, which are quite focused; for instance, we make Indian arrows together. In the workshop the children learn how to make an arrow and practise their concentration and other skills, which they will be able to use in their everyday lives. Sometimes we only give them partial instructions and they have to work together, figure it out.

These children have a hard time working together as a group, because they are alpha males, leaders by nature. These children need attention, which is why mentors must know how to assign a suitable role to them, to address them correctly, to make all of them feel included. When they start functioning as a group, they are very satisfied and proud that they succeeded. Children lack useful knowledge; they spend most of their time indoors, in front of television sets, and are baffled in nature or in their everyday tasks.

Which category of children (intellectual development disorders, sensory integration, behavioural or emotional problems, ADHD, ASD, etc.) do you encounter in your work? The age of the children, the size of the group? You carry out educational activities in nature with them - what exactly do you do

and how? Are they focused activities or are the children playing freely? What does a typical day look like? We cover children with ADHD and partly those with ASD (addicts). The Gozdovnik/Woodsman project targets mostly older children in secondary and primary schools, while programmes for younger children are still being developed. The programmes are therapeutic and combined with experiential education; they are a mix between a therapeutic programme and the popular “survival training”. We combine one with the other. We present all the trends in a way that is suitable for the children.

We work in small groups, with emphasis on quality. When working with a child, you also have to involve his or her family in the therapy. We have very strong media coverage and all the media companies are on our side. Prior to the conference we will be holding a press conference.

Many of the children come from socially vulnerable families. The children were aged 7 and up; this year we have also prepared a group of 5- to 8-year-olds. The groups were made up of 25 children, which we have now increased to 35 children. We enable parents to experience a part of the camp for themselves; we prepare a lecture for them together with Marko Juhant. We are about to start implementing 8-week camps for families on our own property.

We mostly organise camps in the forest, along the Krka and Kolpa rivers. We are also introducing hills, alpinism and water activities. In the forest we carry out the Gozdovnik/Woodsman project. It is a holistic treatment of children, a sort of survival training that is suitable for such children. The child is aided by a holistic person – a pedagogue, therapist and survival instructor. After the camp we are completely exhausted; we cannot afford to fool around; a very serious and integral approach is required. It is a reciprocal process between the children and the therapists, in which the children can act as pedagogues to the mentors if they only know how to listen. The children who have undergone the process of Mavrični bojevniki have the potential to become top experts in psychology. Such experts are a rarity. You have to anticipate a situation before it happens; you have to have strong intuition, a sense of what is going on. Children notice things very well, both positive and negative emotions.

In addition to Gozdovnik/Woodsman, we also carry out the strategy game “Gladiator”, which can be carried out anywhere and focuses more on sport and movement. In secondary schools we also carry out the project “Hiška/Small House” to promote mutual cooperation; the project was initiated by Marko Juhant. Also very interesting is the project for secondary school students “Če ne veš, vprašaj/If You Don’t Know, Ask”.

A 14-day camp at Mavrični bojevniki costs €26,300, because it involves many experts from diverse fields, premium quality food, nutritionists, people who know all there is to know about medicine, etc.

Which experts do you involve in your work? They are experts in the fields of economics, special education, healthcare, sociology, qualitative and quantitative research in science, students from the Faculty of Arts, neuroscientists, dieticians, sport pedagogues (Ivo Drole) ... The mentors are psychologists, special education teachers, sociologists, social workers (e.g. Andrej Pivk); we would also like to involve the Faculty of Health Sciences. Our list of colleagues is created very spontaneously, whenever we come across people who feel the same way and possess the same energy; their professional education is not really that important; it is more about what we do in our spare time, what we are interested in... We are also starting to partner up with police officers, because many of these boys end up in a life of crime.

The children with special needs that we are working with feel things deeply. They are very intelligent, sensitive beings who cannot find an answer in the existing system. We are also perfecting and working on ourselves when we are around them. Children differ, which is why they need holistic treatment. It is important that different experts combine their knowledge and exchange ideas. We cannot say that all it takes is a cognitive approach or, for example, a diet. One child may benefit from a change in diet, another from a neurological approach, a third from homeopathy, a fourth from changing schools, and a fifth from his mother and father patching things up.

How are the children and parents responding to this? The children and parents are thrilled, they like coming back. There is a need for such programmes in society. We are very pleased that the camps are fully booked.

It means the most to me that our work is yielding results in the children and parents; that the camps are instantly booked up, and that we receive bookings for a year in advance. If there were no results, the children would not keep coming back. It is very important that our activities have an actual impact.

Do you think that such a method of working with children (promoting non-formal skills in natural environments) plays an important role in the inclusion of CSN (ADHD) in society? Why? It has proved to be efficient in itself. It is an environment in which you can influence children more easily and teach them the social competences one needs in society. The natural environment is highly stimulating for children with ADHD. We retreat to the forest with the children, we learn something there, and then return to the urban environment. Forest pedagogy has great potential and deserves more attention in kindergartens and schools.

The children would undoubtedly have fewer problems if they spent more time in nature. The Dragotin Kette Primary School and the Puconci Primary School are very much in favour of lessons outside the classroom; they have even set up two outdoor classrooms. A small part of the curriculum programme should be connected with lessons outside the classroom, which would provide an opportunity for the Institute for Forest Pedagogics. Early treatment is very important, however, Mavrični bojevniki does not practise it. The plan of the Mavrični bojevniki institute is to create an educational environment. We are working with LILA, the newly-founded alternative school in Novo mesto, which will begin operation in September.

Jelle Biva

**Educatief centrum Puyenbroeck (Wachtebeke) and Bastion 8
(Dendermonde), Belgium**

Date interviewed: 22.2.2017

Face to face

Address: Provinciaal domein Puyenbroeck, Wachtebeke

Email: jelle.biva@oost-vlaanderen.be

Website: <http://www.bastion8.be> and <http://www.puyenbroeck.be>

Can you tell me why you think it is important to engage children and young people with SEN in the natural environment? In my opinion this isn't any different for children with a limitation than for "normal" children. By playing/learning in a green environment, these children develop an affinity for nature; they get involved and experience a positive feeling. This could be a trigger to arouse interest and/or they later will help in conservation of nature/protection of nature.

By being outside children are more active. In that way they lose a lot more energy, and they can focus better if you want to explain them something afterwards. On the other hand, outside there are more distractions. There is a bigger variation on input: every child will find a clue.

Are there any academic frameworks or models that you think help to explain the benefits for young people with SEN of non-formal learning the natural environment? No use of academic frameworks, mainly experienced-based. "Buikgevoel" (gut feeling)

Can you tell me about your role in relation to working with children and young people with SEN in the natural environment? Puyenbroeck mostly the coordination: administration and content. I write the programs, do the matching of guides with groups, organizing the training of guides. There is no specific training for SEN for guides (volunteers).

For the sake of this research we have adopted 11 categories of SEN. Which categories of children/ young people have you worked with in natural settings? All categories can come, but mainly type 2 & type 8 (mental disability or severe learning difficulties)

The group:

- **Was this a group of children/ young people from a mainstream or SEN setting?** Both. Children from mainstream setting are, however, the vast majority (about 300 groups 'mainstream' and about 20 groups SEN children a year).
- **What ages were the children/ young people, how many were in the session/s/each group?** Mostly 4-6 years old. The number reduces proportionally with their age. There are programs for age groups:
 - 2-4
 - 4-6

- 6-8
- 8-10
- 10-12

Sometimes older children come as well, and then it's always a group of SEN children.

- **Was this a single gender group or mixed/what ratios of m to f?** Mixed groups.

The sessions:

- **Who led the sessions?** They are led by volunteers. Mostly people who did a nature-guide course, or have similar experience (e.g. a biology teacher). Everybody who wants can volunteer to become a guide. They'll be looked upon by experience or certificate which program is suitable to the correct person. The only obligation is the 'certificate of good behaviour.' Volunteers will get a map including all the info about the different programs, they'll choose with program they'll want to guide (mostly 1 or 2 programs). Next to that they'll tag along with another experienced guide for a couple of times who gives the program they chose. If they think they're ready, they are allowed to guide a group for the first time. An experienced guide will tag along to see if they're doing a good job.

Volunteers can also grow into the programs. For example: they will be able to guide more and more different programs. Teachers fill out an evaluation form after every tour, also about the performance of the guide; based on that they will be able to improve the guide. There are about 35 volunteers. The coordination of Puyenbroeck also knows who is good at what theme or with which kind of group, so they'll be matched between the class group and the available guides as good as possible

- **Who else worked with you during the session supporting the children/ young people? were they experienced in working within this setting/ were they trained?** The teachers will also be joining. For mainstream groups: max. 2 teachers per group. For groups with SEN children and groups with very young children: no maximum. (in each group: max. 25 children)
- **How many sessions were there?** Only one session/group in Puyenbroeck. At Bastion 8, there are classes who come twice and even four times a year. But all with non-SEN children. Difference is mainly due to accessibility: by foot for Bastion 8 (in centre, close to several schools) or only by buss for Puyenbroeck.
- **How many groups have you worked with in this way?** In Puyenbroeck: about 320 a year (see above)

The site:

- **Can you describe the setting in which you worked with this group?** When the programs are written the domain is taken into account. For the different locations in the domain there are different programs. That makes that de locations are adjusted well to the activities from the program. The domain is very big and contains some different interesting locations:
 - Play forest: where you can go off the tracks, take everything with you
 - Forest: bigger biodiversity, but here you can't go off the tracks
 - Hug farm: sort of children farm where children can hug the different animals. Very popular with the younger groups and with the SEN groups

Improvements we want to make: better barefoot track, more toys for children with a limitation.

- **What time of year did you work in this area, were there any positives or negatives of the time of year when the sessions took place?** We work year round. However, most popular are June, May and October. June and May because that's a popular time for school holidays. October because of autumn and the 'Week (/month) of the forest' which is included in the curriculum. Every teacher then starts thinking about gathering leaves/fruits/... and wants to go to a forest. The domain is big enough to cope with a lot of children and the fact that they come mainly in those three busy months makes that there is enough time the rest of the year to write on the programs.

Approach to learning:

- **Was it the intention for the sessions to be formal/informal/ non-formal learning (give definitions of these if needed)?** The programs are written with the curriculum as guideline (nature education) but the main goal is that the children have a positive experience.
- **What was the key focus (outcome) of the session?** There must be some improvement regarding the curriculum, but as stated above, the main thing is that they have a positive experience in nature.
- **Did you have a detailed plan for sessions or are they more free flowing?** More or less detailed planning
- **Did you need to adapt/design activities to meet the needs of your group, if so, how?** Teachers choose a program based on age or in the case of SEN children based on the development level. Other modifications are:
 - Change the amount of assignments
 - Change the length of the course
 - Guides will also do modifications at moment itself

On the content of the programs there will be made no modifications.

Practicalities of running sessions:

- **What materials were needed in order to run these sessions?** A lot of material is provided by the depot of the province of East-Flanders:
 - Excursion material (binoculars, loupe jars, search maps, GPS, sails, backpacks...)
 - Hand dolls of many different animals are used to explain assignments
 - Gadgets as a gift to the children
- **How was it funded?** There is a budget for the province of the complete domain Puyenbroeck. All local employees divide the budget over the different posts (recreation, sport and swimming halls, education ...). This budget is sufficient for the volunteer compensation and purchasing new material. The earnings (schools pay per child) become inserted in one big provincial jar. Educational employees get employed through the province. The supplies (building, domain) are from the province. There is no quota over the number of visitors. The budget we get from Puyenbroeck for education isn't depending upon the number of classes that come for a visit.

Review

- **How did the children/ young people respond? Was this feedback similar from all children/ young people?** There is no feedback from students, but teachers keep coming, so we assume that teachers and students are pleased.

- **Who benefitted the most/least for the sessions?** For the SEN groups the curriculum is a bit less important. Teachers indicate which level of difficulty can be used.
- **What would you do differently?** We would like to make a program specifically for children with SEN. This should then be developed in dialogue with teachers who are day in day out busy with these kind of groups.
- **In summary what were the key successes?** First we do something, and afterwards comes the theory. There guides never talk about things that aren't visible or sensitive at that moment. This very low abstraction level ensures a big involvement.

Is there any written documentation supporting this work? No written documentation, “we just go with the flow”, although we will look first what topics are mentioned in their textbooks. Educational employees and volunteering guides often follow workshops in the ‘nature-education’ sector. Modifications in the program happen based on the evaluation form. Each year we calculate the average score of each program (based on all evaluation forms). And we search for trends. If there is a trend that a program becomes less and less popular, than we will try to modify this program. For instance, recently a GPS was integrated into the search-walk.

Dr Natalija Vovk Ornik and Mag. Simona Rogič Ožek

National Education Institute of the Republic of Slovenia:

Date: March 2017

Dr Natalija Vovk Ornik is Head of Department for Placement of Children with Special Needs and Mag. Simona Rogič Ožek is Head of Department for Placement of Children with Autism Spectrum Disorders

The number of children with special needs (ASD and ADHD, behavioural disorders and learning disabilities, etc.) is on the rise in the world, in Europe and in Slovenia; there is even talk of epidemic proportions, which the figures confirm. What are the causes for this in your opinion? *Natalija Vovk Ornik:* I come from the field of placement, where we also issue legal documents pursuant to the Placement of Children with Special Needs Act. In Slovenia this act currently lists 9 groups of children with special needs. I can discuss the data kept by the National Education Institute of the Republic of Slovenia. Recently we have indeed noticed a higher number of submitted applications; the number of applications is rising by calendar years for the entire population.

We must be especially careful in this regard, particularly when comparing various countries. In Slovenia ADHD is currently classified into the chronic illness group, which should be reconsidered, whereas a special group has been defined for autism. It is true that the number of applications is increasing for the entire population, but it is not increasing that steeply; a growth in numbers has mostly been observed for the years when systemic and legislative changes to those areas were introduced in Slovenia. Thus children with autism spectrum disorder were included in the act as an independent group as late as 2011 and the act was officially adopted in 2013; prior to that, children with autism were classified into the group of children with chronic illness, so that they were ensured at least certain rights from the aspect of placement. Suddenly, there were a large number of such children, speaking from the aspect of placement. There is a noticeable trend in the increase in children with speech and language disorders; however, such difficulties are usually temporary. Such children are, for example, preschool children in whom this speech and language disorder later fades away and in school they no longer have it. By far the highest percentage of orders, i.e. 33-36 orders, is indeed intended for the group of children with reading and writing impairments (e.g. dyslexia, dyspraxia, etc.), however, this group of children did not appear until 2000 and its placement began in 2003.

Could a potential reason for this situation in Slovenia be the premature entry of children to school?

Simona Rogič Ožek: It is hard to give an unambiguous answer to that question. Are there any scientific research studies that would prove why the number of such children is so high? Not at the moment. However, it is true that children are different today; they have different problems and needs than in the past. The increase in autism is truly high and is rising rapidly; when I first started researching this area, there was 1 child out of 110 and now it is 1 child out of 68; of course, this is alarming. But I am not sure that our institution is qualified to provide answers.

Natalija Vovk Ornik: It is really hard for us to answer that; it may be connected with premature entry to school, because the speech and language development of children is not completed at that time. They are children who needed some support, but did not have serious speech and language impairments (incomplete articulation of sounds at the age of five). There are a greater number of children in schools that would require occasional logopaedic support; they needed it in the

preschool period and now due to their early entry these problems have continued into their school years. The very way of life has changed as well; communication technology is nowadays increasingly replacing the speech model and this is precisely why children may have a speech delay; it is certainly one of the reasons for this situation.

Simona Rogič Ožek: As regards autistic children, there are no exact data on their increase, but there are plenty of theories and speculations that claim it could be the result of food, the environment, vaccination, etc. It is probably not a good idea to generalise, because these are complex matters; it is hard to pinpoint an individual and specific factor as the cause. With regard to autism, I can say that the more I research it, the less sense it makes, because these children are so different from one another and there are so many forms in which it manifests. So we have to take extra precaution when dealing with such claims.

Can the natural environment have a positive effect on the learning and development of children with special needs? How would you explain or substantiate the benefits of, say, the learning of non-formal skills (cooperation, independence, motor skills, movement, communication, etc.) in natural environments for children with special needs? We agree with the statement that the natural environment has a positive impact on children with special needs. The natural environment works perfectly as a form of experiential learning. Children with special needs need experiential learning; the individual learning of such children is very different, more concrete, and experiential; forest pedagogy is very welcome in such cases and the children react well to natural environments; the results are visible. The National Education Institute of the Republic of Slovenia is currently introducing formative assessment, which monitors and promotes the non-formal skills of children.

Do you think that we could realise such a method of teaching (in natural environments) in the Slovenian education system? Why is such a teaching method not being used more? Where do you see the barriers? Would it be possible to incorporate such policies into the curricula or programmes?

Simona Rogič Ožek: The question is how many things are we supposed to define within such programmes. Even if it were written down in the programme, it might not have an impact on implementation. If the teacher has that opportunity, if the school is introducing experiential and creative learning, then the teacher could carry it out. Even if it is not written in the programme, the teacher can still go and teach in the forest; I do not know if it would change anything if we were to explicitly write down such policies in the curricula or programmes. They are already able to implement such a teaching method; it is about the approach, the work method chosen by a school.

But schools do abide by certain programmes and guidelines?

Simona Rogič Ožek: Here at the institute we are constantly guiding teachers towards being creative. We want to minimise frontal instruction. We are guiding schools towards such work, towards formative assessment, work in groups, pairs; you should individualise the objectives as much as possible in order to adapt to the child, his/her abilities and needs, so that he/she may learn at his/her own pace. Schools prefer to stick to the established practices; in all these years the system has unfortunately remained rigid.

Natalija Vovk Ornik: Schools also have different opportunities for developing learning in nature, e.g. the Centre for School and Outdoor Education, premises, activities; schools are generally making use of all those things.

Simona Rogič Ožek: All of the programmes for children with special needs include special pedagogical activity; these children need support in the emotional and motivational area, in developing independence; these programmes are already supporting children in the non-academic areas; the children certainly need all of those skills and the programme supports that. I understand forest pedagogy as a means, as an environment in which you can teach children anything, including history. We recently saw a good presentation, the learning of history in the forest. In the forest they made paint from the soil, just as they had in the past. But the question arises: How do we see school today? Is school preparation for a profession, preparation for life, for personal growth? Nowadays, school is no longer preparation for a profession; these professions will no longer exist by the time these children grow up. We are currently still facing many challenges and questions.

What about norms? Is it necessary that the co-teacher is a member of the school's professional staff?

Simona Rogič Ožek: Norms are a matter of policies, of the ministry, and are laid down for children with special needs. There is also the issue of the teacher's role. Teachers often think that if they had fewer children in the class, work would be easier. The question is how much energy are we investing in using different didactics and methods, which would enable us to cope with a greater number of children. What does this mean? It means how we can use diverse work methods to support the learning of a greater number of children. We often forget about the quality of teaching. It is not so much about changing the rules; the teaching method is probably more important. We can change the rules, but if teaching remains frontal, we have not accomplished anything. Of course, we need more people to take children to the forest, but that is another matter. Many initiatives have appeared in practice to reduce the norm for autistic children, but if I carry out the teaching process well, I can handle more children; however, from the aspect of mobility and transport, I do indeed need more people.

Then there is the issue of protectiveness. Parents are not the only ones who are overprotective. We are sometimes overprotective in schools; there is the risk assessment, protocols, etc.; of course there are dangers, but that should not prevent me from going outside, we just have to prepare ourselves. You can never be prepared for everything, but such is life. Overprotectiveness means that we do not even go outside; there are many things that can happen in the classroom as well. Teachers need momentum, encouragement, support, especially from the administration.

Natalija Vovk Ornik: The education system is governed by too many norms; we want to turn everything into rules or norms. Most of the issues regarding children with special needs concern temporary escorts, because teachers and parents are concerned; there are always problems when we go outside to nature, but our health care clearly states that we must teach a child to be independent. We have to know where life fits into this. Nowadays, it is difficult to meet the needs of individuals within the system; if something is not written down, we do not like doing it; if it is not written down, the teacher will not do it. The system itself has been set up in such a way that has led them to this. They think that every child should have a permanent escort; teachers are worried about who will look after the children with special needs, but we have to teach them to be independent.

Simona Rogič Ožek: The question is: How much do we even trust the teachers? I was conducting research into children with mobility impairments and can say that in the area of special needs the children are overprotected, which is counterproductive and bad for them. We can imagine the impact this has on their development and personality structure.

**Assistant Professor of Didactic of Natural/Primary Science Darja Skribe
Dimec, Faculty of Education, Slovenia**

Ljubljana

10 March 2017

You are a professor of Didactics of Natural Sciences, also for the field of children with special needs.

Why do you think that the subject of Natural Sciences can be important for children with special needs? Knowledge about what surrounds you is the most natural thing. When children are born, they begin to discover the world around them. Curiosity is present in all of us and it is important that we preserve it, nurture it and develop it. This is even more important for children with special needs, because to them their surroundings are not represented by words, but by concrete objects. Many children with special needs remain at Piaget's concrete operational stage, which means that contact with concrete objects is necessary. For these children, abstractions are less important than practical work and using their senses. At this stage, the child learns through concrete operations. This is equally important for children without special needs; there are no significant differences. The only difference is that pupils who are attending an adapted programme or special institutions find it more difficult to understand abstractions and generalisations.

In your opinion, would educational objectives be attained more easily if educational activities would take place in natural environments more often?

In natural environments children undoubtedly attain the objectives of formal education more easily, both children without special needs and those with special needs. It also builds social relationships, children's independence, their self-confidence, etc. I am a great advocate of learning in natural environments and am all for it.

Of course, there are disruptive factors outdoors, which means that children may be distracted by many things, but the many advantages nevertheless prevail. When giving lectures on the topic of natural sciences, I emphasise experiential learning outside of educational institutions; I encourage students to study outdoors. I combine all of my lectures with activities, which means that a portion of lectures and practical classes is held outdoors. I always carry out the following practical classes: Feel the Environment, The School Surroundings Are Full of Mystery, and Photography without a Camera. I try to make the students excited about taking their pupils to nature as much as possible. There is a great shortage of this in our education system.

I have been working in the education system for almost 40 years and have been teaching Natural Sciences for all this time. While studying for my master's degree, I noticed that our schools did not have enough active lessons; that lessons were too focused on words and not enough on experience. I afterwards focused mostly on process knowledge, on various natural science procedures, such as perception (using the senses), measuring, comparing, sorting, categorising, organising, predicting, proposing hypotheses, experimenting, planning and conducting simple research, reaching conclusions, informing, working with data, etc. I felt that there was a lack of such knowledge in Slovenia. In 1991, I wrote a part of the textbook *Dober dan, Zemlja - Ali se poznam* [Good Afternoon, Earth - Do I Know Myself?], in which I presented process knowledge (the development of process skills, abilities, etc.) as equivalent knowledge. The Faculty of Education also took part in the TEMPUS project Development of Initial Education in Natural Sciences, under

which we collaborated intensively with colleagues from England and the Netherlands for four years. We held many seminars and prepared a great deal of literature. As a result, Natural Sciences lessons at the primary level improved greatly in Slovenia. Teachers actually began to focus more on process knowledge. I consequently found a new challenge for my PhD. I realised that active lessons were no longer a problem at the primary level, but that knowledge assessment was. Despite the fact that teachers were organising various activities for developing process knowledge, they stuck with classical knowledge assessment and only tested reproduction skills: "I tell it, the pupil learns it and tells it back." I was researching the topic of assessing the knowledge of natural sciences, including process knowledge and attitudes, which, in addition to the knowledge of content, define natural science literacy. I almost gave up on that, because despite the great deal of invested work, effort and published literature, there were no real results. As soon as I discovered that there was nothing more I could do regarding knowledge assessment, I realised that a great problem in our schools was the lack of outdoor lessons. I attend Erasmus exchanges every year and believe that the main flaw of our schools is that we keep the pupils shut in the classroom all the time, even during recess. I have just returned from Finland: a 45-minute lesson, 15 minutes outside, where the pupils play and scream freely, and can then go back to concentrating on their work for the next 45 minutes. When I attend the student teaching placement of my students, I see that pupils are shut in the classroom for 4 or 5 periods, with only a short recess in between; just enough for them to put notebooks and textbooks back in their bags and prepare new ones; they even eat lunch in the classroom. I see this as genuine violence against pupils. In Finland, I saw that their curriculum and schedule envisage half an hour of spontaneous playing outdoors every day.

Are the curricula (learning objectives) for persons with special needs well worked-out in the Slovenian school system? The curriculum for the adapted educational programme with a lower educational standard is flawed, from many aspects. It contains linguistic, formal and technical errors, which is very sad, as that is the only official document and obligation for teachers. In light of that, it should be of high quality. The curriculum for regular primary school is too detailed; I would prefer it if it mentioned only broader sets, the key contents. The objectives are also too detailed, which makes the teachers stress over them too much. I would recommend fewer contents, greater focus on process knowledge, and greater incorporation of sustainable development in connection with outdoor lessons; in my opinion, the aspect of attitudes is also missing; it should be developed and progress should be evaluated. I am not talking about knowledge, but about curiosity, critical thinking, precision, etc. We teachers want our pupils to be curious; we want to preserve, promote and develop that ability in them, but the system does not provide us with the tool to reward pupils for it and it therefore has no real value for them. If the system would allow that, the pupils would believe that it is important and would get better at it. It is sad that children come to school very curious but afterwards, as they progress through grades, they become less and less curious and interested more in marks alone. There should be more project work, cooperative work ... It could all be defined as guidelines.

The main problem is that teachers are following the learning objectives and run out of time for cooperative learning, for working in groups, for project work, etc. Pupils could prepare a lot of things together, learn on their own, but the teachers do not encourage that. Within this context, the curriculum for pupils with special needs should also be modernised; it is based on the curriculum for regular primary schools and contains a few adjustments with regard to the age and specific needs of pupils.

Foreign countries are also making great changes. For example, in Finland they tried to do away with the categorisation into subjects; the curricula are written thematically and are not connected with specific school subjects. On the other hand, I was disappointed when I attended a lesson at one of their primary schools. I found the lesson very tedious and uninteresting. This shows that not all have made actual progress in that direction in practice. The trend certainly exists to have fewer detailed objectives and detailed contents; cross-curricular integration is a must. Scotland has a very good system which greatly emphasises outdoor lessons; they also do a lot of research work. In Slovenia, for example, we do not have a comprehensive environmental education study programme, which would create experts in outdoor lessons.

Do you think that we could realise the method of teaching in natural environments in the Slovenian education system? Where do you see the barriers? I think that Slovenians are spoilt as regards the weather. As soon as the weather is drizzly, we get it into our heads that the child will be dirty or will fall ill. The parents think that, which also affects the teachers, while everyone already thinks that pupils must study in school using books and notebooks and hence have to be indoors. These are the stereotypes of the adult view of school, which are unfortunately changing very slowly. I am sure that there are schools in Slovenia, and know that there are quite a few kindergartens, where children play freely or have lessons outdoors (e.g. in Kamnik, Kranj and Preddvor); some of them have permaculture projects; carry out forest pedagogics, etc. Changes should be made on the systemic level; we should follow the example of Finland and include movement outdoors during recess, regardless of the weather.

There are several barriers to why teachers do not take pupils out of the classroom. The first barrier is an organisational one. We have to collect money, pay attention to the weather, and provide an escort. There is a great flaw on the systemic level, which does not allow a responsible adult to be the escort, for example the mother, father, grandmother, grandfather or student. Thus an additional pedagogue must be provided per 15 pupils when going on field trips.

Another problem relates to contents, because teachers are afraid that they will not be able to answer all of the questions which pupils might ask outdoors, and that makes them feel insecure, unconfident. Then there is the problem of discipline. If pupils are not used to going outside, then they run wild, and teachers would rather not take them outside again.

All of these barriers are surmountable if one is familiar with the methods for conducting efficient lessons outdoors. My students and I avoid the organisational obstacles by not taking a bus, but by taking advantage of the faculty surroundings. The problems with contents can be avoided by using suitable work methods and various didactic approaches. Discipline problems can be avoided by preparing the activities in an unusual, mysterious way, in short: by using good didactic approaches. Moreover, the more you go out with your pupils, the more commonplace it becomes. And the teacher becomes more confident.

There are a growing number of schools with nature classrooms; some of them have only a few desks and benches, whereas others are sheltered by a roof, and some of them even have small cottages. I do not see why pupils could not occasionally solve mathematical tasks in nature in the fresh air, somewhere outdoors; why they could not listen to poetry or stories in Slovene Language lessons under a tree; nature also provides many opportunities for music education, e.g. searching for natural musical instruments; nature also provides many opportunities for arts education, etc. In fact, we teachers have two options – we can make use of a concrete environment to carry out

lessons or we can simply be outdoors, doing the same things we would be doing in the classroom. There is not enough of both in schools. The same applies to pupils with special needs.

Do you believe that such a teaching method may have an important role in the inclusion of people with special needs in society? Why? As pupils with special needs spend more time outdoors, they are encouraged to be independent, and consequently they become more confident.

Which are the basic elements that should be improved on the systemic level? Which are the good qualities of our system? I wish that all of this effort does not stay at the project level, but that we would actually make progress in the Slovenian education system on the systemic level. We would have to achieve two key things. Firstly, that kindergartens and schools would be allowed to entrust the role of escort to responsible adults, who are trusted by the school or kindergarten teacher and who are not necessarily pedagogically educated – for example parents, grandparents, volunteers or students attending placement. Secondly, that the syllabus would clearly include a 15-minute recess between periods for spontaneous playing outdoors; that the curricula would encourage outdoor activities even more systematically; and that the curricula would contain fewer detailed objectives and would highlight the basic contents.

Slovenia does, however, have an excellent system of extracurricular activities, which we should be proud of and which other countries are envious of with good reason. Under the Centre for School and Outdoor Education the state offers various activities on the systemic level, financing the entire pedagogical work in those centres, while the parents cover only the costs of travel and accommodation. Also very good is the system of outdoor school and activity days (natural science, cultural, technical and sport days). The compulsory and expanded part of the syllabus states that a pupil must spend several days in a row outside of school at least twice during schooling. This part has been systemically perfected and would merely have to be used further for outdoor lessons. In other parts of the world, there are individual institutions that enable pupils outdoor lessons, but not in the same way or to such an extent as in Slovenia.

Irena Kovačič

Uroš Jelen

Slovenia

Irena Kovačič is; preschool teacher and special needs occupational therapist, Uroš Jelen is of physical education, specialised in kinesiotherapy.

Why do you think that the nature can be important for children with special needs? Spending time in natural environments is important for children with special needs from several aspects. By walking on natural and diverse terrain (grass, sand, rocks, leaves, etc.), a child with special needs acquires gross motor abilities and skills, including perseverance and fitness. Being outdoors has a significant impact on immunity and consequently on health. By obtaining information through various sensory pathways, they are perceiving and learning about the basic and later on also other characteristics of nature, in connection with all of the fields of activity of the kindergarten and school curriculum. However, it is very hard to analyse, measure and objectify all of the experiences which they undergo in nature.

How would you explain or substantiate the benefits of, say, the learning of non-formal skills (cooperation, independence, motor skills, movement, communication, etc.) in natural environments for children with special needs? The learning of non-formal skills in natural environments significantly contributes to one's self-awareness and is consequently a basis for a good self-image, taking their differentness into account. With proper guidance this is the best life lesson for any individual. All of the skills that we are performing and training in nature are more genuine; they cannot be fully controlled, but you adapt to them, feel them, and by using self-initiative create the end result, picture, gesture, touch and word. A human being is nature, which is why it is important that we develop as many non-formal skills as possible in nature, where it is easier to connect movement, thinking, touch and sentience, and express ourselves in a primal way.

Which category of children (intellectual development disorders, sensory integration, behavioural or emotional problems, ADHD, ASD, etc.) do you encounter in your work? The age of the children, the size of the group? Do you carry out educational activities in nature with them and what exactly do you do? Are they focused activities or are the children playing freely? In our work we encounter children with mental disorders (all categories), sensory processing disorders, attention deficit disorders, autism spectrum disorders, blind and visually impaired children, and all categories of children with mobility impairments. The children are mostly between the ages of two and seven. There are six children in the group. We also work with professional staff in regular groups, in which a child has one of the above-mentioned disorders.

We carry out educational activities with the children in nature (terrace, playground, walks and a few locations in the vicinity of the kindergarten, such as a pond, forest or park) on a daily basis. In the case of all children with special needs we are trying to develop natural forms of movement as much as possible, and influence their motor dysfunctions through free play and being creative in a natural environment. The focused activities are usually connected with the month, taking into account the particularities and level of development of each child, and include contents from all fields of activity of the kindergarten curriculum. They are carried out depending on the weather,

the number of children present, and the number of adults in the group. Children are enabled to play freely outdoors every day.

We believe that a well and wisely organised playground plays an important role in working in a natural environment; an important section is the sensory trail and the various climbers, playground equipment and swings, and the different types of ground (gravel, grass, hillocks, tunnels, fine sand) throughout the playground.

We are aware that all of those things can be found in the forest, on meadows and near brooks. Since the number of employees in departments for children with special needs is limited and almost every child needs an escort to the given surroundings, we usually make use of the environment near the kindergarten. All other things that are connected with the implementation of a specific activity depend on the resourcefulness and expertise of an individual teacher or member of professional staff. Merely walking with the children along a pond, through the forest, in a natural environment and perceiving nature through the senses is an excellent method for children with special needs.

What would you advise pedagogical staff? How should work in natural environments with CSN be carried out? Judging from experience, this leads to better results and work carried out in natural environments (meadows, ponds, forests, near brooks, with animals – horses, dogs, etc.) always makes a bigger impression on the children and on their sensory integrity when compared with physical and educational work within four walls – in close quarters. Every physical activity in a natural environment is relaxing; the children relax more easily and more efficiently combine movement, touch, breath, smell and taste. Children with special needs like to taste all of the objects in nature with their mouths, which is normal; as pedagogues and physical therapists we are aware that this process activates the primary nuclear centres of the brain and of the limbic system.

We also recommend as many physical exercises in nature as possible, which imitate natural forms of movement, such as walking, standing, running, swinging, creeping, crawling, climbing, rolling and sliding. When working with children with special needs, the deep connection between the therapist and the child is important, as well as having a feel for their behaviour, observing them, and trying out their movement patterns, types of behaviour and reactions as often as possible. When you try to carry out their movements, reactions and gestures as a pedagogue, preschool teacher or therapist, you realise how limited we, “normal” people, are, which allows you to discover the hidden areas of perception and movement within, thus learning many new things.

Do you believe that such a teaching method has an important role in the inclusion of CSN in society? Why? When being outdoors and using diverse natural surfaces, the children with special needs are more or less in contact with other children and adults, and those other children and adults also gain important life experiences. This enriches our lives. For this reason, we are all beginning to realise that it is perfectly normal to be different, and that all human beings differ from one another.

Eliza Ashworth

Ancora House Forest School

Chester, England

July 2017

Report

The initial pilot project ran for six weeks from the 26th April to the 26th May. Recruitment of young people was made by establishing whether they were staying for at least six or more weeks so that they could attend the full programme. Also on the results of their multiple intelligence tests to see whether they were 'nature smart' and from an initial informal chat to see whether they felt they would enjoy the experience. Medical forms and permission slips were completed and they had the choice to complete the Nature4Health WEMWBS questionnaires anonymously which they all did.

Four young people from Indigo ward (aged 15 to 16) were chosen and sessions were held once a week on a Thursday afternoon for two hours. I was the Forest school lead and had a teaching assistant for support. All young people wore appropriate footwear (sturdy boots) and left phones on the ward, the first challenge that we had to overcome!

During the FS sessions we followed the same structure and routine (circle time, Forest School activity, fire lighting, cooking, reflection, free play) this proved beneficial. This was because many of them, especially those with ASD become very anxious when things are changed too often so introducing too many new skills too quickly would only demoralise these young people whose self esteem and motivation are low.

I also found that small achievable tasks that can be completed in one session (so that they can reflect on what they have achieved) is preferable to a long term project, that may take weeks to complete. Low mood impacts on their cognitive abilities and therefore their concentration, so short, scaffolded activities fit with short concentration spans. However the evidence shows that the woodland environment provides fewer 'distractions' so young people do manage to concentrate on tasks for longer than they have ever managed in the classroom.

The kind of activities that we followed over that six-week course were: use of flint and steel, fire lighting, whittling sticks (using potato peelers) ecology projects, den building, and sculpture work using natural materials.

In the future I hope to introduce more tool use so we can make our own mallets (bow saw and axe) and get involved in bigger woodland management projects with TCV like coppicing. Running the programme across the year is important too and use of the rangers hut may facilitate this if we had a base to drop into at the end of the session. This space can also be used to display information/data that we have collated so that visitors to the country park can see what has been achieved at our FS sessions.

The major impact that I can see from this FS intervention is the improvement in social and communication skills and the ability to focus on tasks for longer. The natural woodland environment had a calming effect, provided fewer distractions and enabled the young people involved to work together in a relaxed way. Therefore we observed more positive interactions over the six weeks, especially with young people that have ASD or ADHD than would have happened in a classroom environment.

I am now running the next six week course which will take us up to the summer holidays and have recruited three young people. In the next academic year I may review the offer and change the focus so that FS could be provided as a workshop so larger numbers of young people can access the provision. Although the site is still only suitable for a maximum of six and we have to take into consideration the ecological impact of running more sessions. This will be reviewed on a six weekly basis and activity changed accordingly.

Websites

There are a number of useful websites that can provide support and ideas for

<http://www.healinglandscapes.org/related/play.html>

<http://www.sensorytrust.org.uk/resources/inclusive-play-booklet.pdf>

<http://www.sensorytrust.org.uk/>

http://www.academia.edu/473690/Nature_of_Experience_Engaging_special_needs_I

http://www.walesonline.co.uk/news/education/wales-first-entirely-outdoor-nursery-12432825#ICID=sharebar_twitter

[https://www.naturepedagogy.com/.](https://www.naturepedagogy.com/)

<https://naturalconnectionsblog.wordpress.com/category/july-2016/>

Appendix 1

Initial questionnaire to gather best practice

We are working with environmental partners and schools for children with special needs across the UK, Belgium and Slovenia as part of Erasmus+, a European funded project.

Together, we are looking to identify examples of best practice in the delivery of non formal learning for children with learning difficulties in the natural environment.

We know from research that some children learn better in a natural environment, and this is especially so for children with learning difficulties.

However, to our best knowledge, there is no educational material on nature-based skills development/non -formal learning.

The aim of this project is to help improve practice by providing a toolbox, to support non formal learning practice in the natural environment and so improve the wellbeing of our children.

Your information will help to develop a database of good practice and develop tools and material to help develop practice and widen participation by schools.

We value all responses, whether you are a very experienced practitioner or just beginning.

We will plant a tree for every response received and enter each response into a prize draw with an opportunity to win a 50 euro voucher.

If you have any questions about the survey, please do not hesitate to contact us.

Thank you in anticipation of your help.

Paul Nolan - The Mersey Forest – paul.nolan@merseyforest.org.uk

Name and address of your organisation

Do you run specific programmes of activity that make use of the natural environment for non-formal learning?

Yes

No - you can still be part of the network.

If you do have specific programmes, please could you describe it/them briefly? For example how often do the children get out into the natural environment, how long do they spend there and what they do whilst there, is it all year round?

Which children are involved – Please could you describe the age range of the children and their needs.

Have the children involved in these programmes shown improved personal development and general skills? Please can you tell us about these improvements briefly?

At what stage are you in the delivery of these programmes?

0 - just started

50 - programme starting to get established

100 - programme well established

How is the activity funded? Is it part of the core education provision?

Where does the activity take place? Is it in a school, or at another place, please provide a brief description of the environment that is used. For example, "takes place in a small woodland on our school site" or "we use the local park which has large areas of grass".

Who leads the activity?

Is this person specifically trained in outdoor learning?

Yes

No

Is non formal learning in the natural environment important for your organisation?

0 - Is not supported by the organisation

50 - Is seen as an optional extra

100 - A key programme at the heart of our organisation's values

Is there management support for the programme?

0 - No support

50 - Moderate level of support

100 - Programme fully supported by management of the school

Are there any reports and/or data available for the activity/programme?

Yes

No

Any comments please add here

Are parents/carers supportive of programmes that you have for learning in the natural environment?

Yes

No

Not sure

In your opinion what are the key factors for the successful delivery of a learning activity in a natural environment?

In your opinion what are the barriers that prevents you or your organisation making better use of the natural environment for non formal learning?

What mistakes have you made in developing the programme? Or, more positively, what would you do differently next time to improve your programme?

Please add anything else about the work that you do or the benefits that the children gain from non-formal learning in nature that you think would be helpful to others?

Please can you provide your email address?

Would you like to be involved in a network sharing best practice identified through this project? This may also mean that we contact you to follow up this survey.

Yes/no

Appendix 2

Intellectual Output 1 – Key Tasks and Timetable

Shading indicates stage for involvement by various partners

Stage 1	TMF	UK Schools	Belgium/Slovenia Partners	Deadline	Complete
Provide format of contacts for information required				End of November	Yes
Compile list of contacts and send to TMF				End of November	In progress
Email translated for partners (where needed)				End of November	In progress
Survey Monkey set up online				End of November	Complete
Drop Box set up online for external partners (or can emails publications)				November	Complete - Sharepoint
Devise format for reviewing information				Mid-December	
Devise template and Q's for interviews				Mid-December	
Review of information in English				From Mid-December to end of Jan	
Review of information – Other languages				From Mid-December to end of Jan	
Interviewing experts (one to one)				From Mid-December to end of Jan	
Compilation of reviewed information including Survey Monkey				By end of January 2017	
Summary report				By End of February	
Presentation of findings				Ljubljana meeting	
Discussion leading to next steps of project				Ljubljana meeting	

Appendix 3: Green Learning Environments Best Practice

Project Name	Halton Forest School
Country	UK
Delivered by	Halton Borough Council

Age Range	All ranges - adults too!
Numbers of children per session	
Time required	Forest School sessions and general walks
What are the non-formal learning benefits for children	It is a way of interacting with non mainstream children who have difficulty in communicating
Where does the activity take place?	Local Parks and LNRs
Materials needed	Forest School sessions and general walks
Description of the activity	Forest School sessions and general walks
Who leads the activity? Is the leader trained specifically to lead this activity?	Siobhan Royal Yes
Key Factors for successful delivery	An enthusiastic leader Funding/staff shortages Its important to get children outdoors to instate a sense of ownership and care
What would be done differently	none
Learning Flow	
SEN Children who may benefit most?	All ranges - adults too!
Reports and data	Yes
How is the activity funded?	National Lottery and other small grants
Who do you see as an Expert? What sources of information do you use?	Training staff from organisation

Contact details for more information	Email: anthony.brandreth@halton.gov.uk
	Phone:
	Website:

Assessment	Reviewer 1	Reviewer 2
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Learning points	Good way “of interacting with non mainstream children who have difficulty in communicating” Its important to get children outdoors to instate a sense of ownership and care	How is the communication encouraged by the forest walks? (the information above is to general, I think)
Is this best practice	Yes/No	Yes/No/maybe (when more information)
If follow-up needed – what information do we need?		What do they do during the walks, what makes the children communicate better, which kind of ‘communication stimulants’ works the best for which type of children ...
Recommended for inclusion in the toolbox?	Yes/No	Yes/No

Project Name	LWT Outdoor Learning
Country	UK
Delivered by	Lydia McCool. The Wildlife Trust for Lancashire, Manchester and North Merseyside

Age Range	Children aged 5-18 both abled bodied and with physical or mental disabilities.
Numbers of children per session	
Time required	Lottery funded programme, children are involved in outdoor hands on learning one day a week over a six week programme. All year round, activities include introduction to surveys, habitat management, sharing their experiences through film or art and curriculum linked learning.
What are the non-formal learning benefits for children	Yes, a change in behaviour to be calmer and more engaged in the activities provided than they were within the school grounds. Some children do struggle for the first few sessions if the outdoor classroom is too alien to them. General feedback is that the teachers feel the children are more interested and active when learning outdoors.
Where does the activity take place?	Schools and on our mossland nature reserve
Materials needed	Lottery funded programme, children are involved in outdoor hands on learning one day a week over a six week programme. All year round, activities include introduction to surveys, habitat management, sharing their experiences through film or art and curriculum linked learning.
Description of the activity	Lottery funded programme, children are involved in outdoor hands on learning one day a week over a six week programme. All year round, activities include introduction to surveys, habitat management, sharing their experiences through film or art and curriculum linked learning.
Who leads the activity? Is the leader trained specifically to lead this activity?	Myself as the project officer for the Lancashire Wildlife Trust Yes
Key Factors for successful delivery	Hands on, small risk taking to allow children to explore school and parental attitudes towards learning in bad weather A sense of freedom, most the children I work with do not get the opportunity to freely explore and play in their local wild spaces. At most they visit a highly manicured park.
What would be done differently	Be flexible to the individual and the schools needs aka curriculum learning balanced with forest school self learning.
Learning Flow	

SEN Children who may benefit most?	Children aged 5-18; both abled bodied and with physical or mental disabilities.
Reports and data	Yes
How is the activity funded?	Heritage Lottery Fund and Esmee Firbairn
Photograph	If available – we can go back to person who submitted the example if we think this is useful.
Who do you see as an Expert? What sources of information do you use?	Other staff members. No not an expert, always learning.

Contact details for more information	Email: lmccool@lancswt.org.uk
	Phone:
	Website:

Assessment	Reviewer 1	Reviewer 2
Learning points	<p>“habitat management”</p> <p>“Some children do struggle for the outdoor classroom is too alien to them”the first few sessions if</p> <p>Feels “opportunity to freely explore and play in their local wild spaces” would ehance learning.</p>	<p>Some children do struggle for the outdoor classroom is too alien to them => are there tips/trics to overcome this problem?</p>
Is this best practice	Yes/No	Yes/No
If follow-up needed – what information do we need?	<p>How she thinks “curriculum learning balanced with forest school self learning” could be managed.</p>	<p>How does the ‘nature education (introduction to surveys, habitat management, sharing their experiences through film or art) and the curriculum linked learning influence each-other?</p> <p>Is there a detailed programme that we can use for the toolbox?</p>
Recommended for inclusion in the toolbox?	Yes/No	Yes/No

Project Name	Forest School, Knowsley
Country	UK
Delivered by	Knowsley Council

Age Range	
Numbers of children per session	
Time required	Depends on what the group commissions. Usually bushcraft or forests school type activities
What are the non-formal learning benefits for children	Building self esteem and peer to peer relationships
Where does the activity take place?	Local park with woodland
Materials needed	Depends on what the group commissions. Usually bushcraft or forests school type activities
Description of the activity	Depends on what the group commissions. Usually bushcraft or forests school type activities
Who leads the activity? Is the leader trained specifically to lead this activity?	Knowsley Council Rnger Service Yes
Key Factors for successful delivery	Safe, friendly, child led environments. Dynamic staff allowing suitable risk taking Insurance restrictions eg tree climbing. No dedicated site, each day the site has to be reconstructed and taken down for the evening
What would be done differently	Always be trueful in your post event reviews.
Learning Flow	
SEN Children who may benefit most?	
Reports and data	No
How is the activity funded?	Schools commission our services
Photograph	If available – we can go back to person who submitted the example if we think this is useful.
Who do you see as an Expert? What sources of information do you use?	Forest School Wales also Archimedes training. Not the Forest School Association.

Contact details for more information	Email: aaron.reading@knowsley.gov.uk
	Phone:
	Website:

Reviewers to complete

Assessment	Reviewer 1	Reviewer 2
Learning points	Risk assessments necessary in UK	"Always be trueful in your post event reviews."
Is this best practice	Yes/No	Yes/No
If follow-up needed – what information do we need?	Include generic risk assessments for a range of activities in toolbox that can be adapted	I agree to include a 'generic risk assessment for a range of activities' in the toolbox. Maybe we can also add a form to review the outdoor-activities in the toolbox? So teachers can monitor themselves?
Recommended for inclusion in the toolbox?	Yes/No	Yes/No

Project Name	Our School's Great
Country	UK
Delivered by	The Mersey Forest

Age Range	All children within a year group. They may have a variety of needs, ADHD, ASD etc
Numbers of children per session	
Time required	Forest School, working with children in small woodlands in a number of schools across the Mersey Forest area. The work is all year round and tends to be focussed in 12 week blocks with individual schools. Sessions tend to be 1 - 2 hrs in duration
What are the non-formal learning benefits for children	Yes. There has been a marked improvement with many ADHD children's behaviour in particular.
Where does the activity take place?	Tends to be woodlands in the school grounds or in nearby areas
Materials needed	Forest School, working with children in small woodlands in a number of schools across the Mersey Forest area. The work is all year round and tends to be focussed in 12 week blocks with individual schools. Sessions tend to be 1 - 2 hrs in duration
Description of the activity	Forest School, working with children in small woodlands in a number of schools across the Mersey Forest area. The work is all year round and tends to be focussed in 12 week blocks with individual schools. Sessions tend to be 1 - 2 hrs in duration
Who leads the activity? Is the leader trained specifically to lead this activity?	Mersey Forest staff Yes
Key Factors for successful delivery	Trained leader, support from staff, funding and lack of wider awareness of the benefits. We are also looking at how we might train teachers in the teacher training colleges. We help to coordinate a network of schools,
What would be done differently	
Learning Flow	
SEN Children who may benefit most?	All children within a year group. They may have a variety of needs, ADHD, ASD etc
Reports and data	Yes
How is the activity funded?	Project funding
Photograph	If available – we can go back to person who submitted the example if we think this is useful.

Who do you see as an Expert? What sources of information do you use?	
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Contact details for more information	Email: Paul.Nolan@merseyforest.org.uk
	Phone: 01925 816217
	Website: www.merseyforest.org.uk

Reviewers to complete

Assessment	Reviewer 1	Reviewer 2
Learning points	Training necessary to ensure confident staff	There has been a marked improvement with many ADHD children's behaviour in particular => during the session or also afterwards?
Is this best practice	Yes/No	Yes/No
If follow-up needed – what information do we need?	Toolbox to include simple training material – perhaps this could be carried out every year/ two years to refresh and sweep up new staff	Are those activities curriculum based?
Recommended for inclusion in the toolbox?	Yes/No	Yes/No

Project Name	Woodland Skills Centre
Country	UK
Delivered by	Woodland Skills Centre , The Warren, Bodfari, Denbigh LL16 4DT
Age Range	Mostly 11-18 years old. Complete range of needs.
Numbers of children per session	
Time required	We run programmes throughout the year. Current programmes are for : special needs pupils (local authority day school?; children with high level special needs (private residential school); Pupil Inclusion programme with local Education Authority; NEET. We also run a wide range of programmes with children of all ages and abilities.
What are the non-formal learning benefits for children	Yes. The commissioning bodies recognise the value of what we do. We do a wide range of practical work in the woodlands and workshops but the emphasis is on personal social development.
Where does the activity take place?	We are a social enterprise operating in our 50 acre site - woodland, workshops, heritage orchard, tree nursery, arboretum, polytunnel, allotments, etc
Materials needed	
Description of the activity	We run programmes throughout the year. Current programmes are for: social needs pupils (local authority day school?; children with high level special needs (private residential school); Pupil Inclusion programme with local Education Authority; NEET. We also run a wide range of programmes with children of all ages and abilities.
Who leads the activity? Is the leader trained specifically to lead this activity?	Members of our core team, all of whom are Level 3 Forest School leaders and Level 3 Social Forestry practitioners Yes
Key Factors for successful delivery	Good site, good staff None We are always willing to share our experiences over the last 20 years and support other individuals and organisations.
What would be done differently	we recognise that what we offer is not suitable for all young people but are always willing to try meet the needs of new groups
Learning Flow	
SEN Children who may benefit most?	Mostly 11-18 years old. Complete range of needs.
Reports and data	Yes
How is the activity funded?	We do receive any external funding and so charge costs to the commissioning agency.
Photograph	If available – we can go back to person who submitted the example if we think this is useful.

Who do you see as an Expert? What sources of information do you use?	We run Social Forestry OCN level 3 courses here and draw on the expertise of our staff, course tutors and students and participate in various networking groups.
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Contact details for more information	Email: enquiries@woodlandskillscentre.co.uk
	Phone:
	Website:

Assessment	Reviewer 1	Reviewer 2
Learning points	Training necessary to ensure confident staff	Staff is trained: "Level 3 Forest School leaders and level 3 Social Forestry practitioners" =>?
Is this best practice	Yes/No	Yes/No
If follow-up needed – what information do we need?	Toolbox to include simple training material – perhaps this could be carried out every year/ two years to refresh and sweep up new staff	What's the "Social Forestry OCN level 3 course", is this something we can include in the toolbox?
Recommended for inclusion in the toolbox?	Yes/No	Yes/No

Project Name	Young Explorers Club
Country	UK
Delivered by	The Conservation Volunteers, Manchester and Pex Hill offices
Age Range	8-12, we have delivered sessions to disabled children through Trafford Centre for Independent Living but these were separate to the above sessions
Numbers of children per session	
Time required	We run our Young Explorers Club which is aimed at 8-12 year olds and we have just finished delivery of a project funded through Trafford Housing Trust run during school holidays, one session per week for 2 hours.
What are the non-formal learning benefits for children	Improvements in confidence, communication skills and knowledge of the natural environment
Where does the activity take place?	Currently at Sale Water Park in Sale, Trafford
Materials needed	We run our Young Explorers Club which is aimed at 8-12 year olds and we have just finished delivery of a project funded through Trafford Housing Trust run during school holidays, one session per week for 2 hours.
Description of the activity	We run our Young Explorers Club which is aimed at 8-12 year olds and we have just finished delivery of a project funded through Trafford Housing Trust run during school holidays, one session per week for 2 hours.
Who leads the activity? Is the leader trained specifically to lead this activity?	The Conservation Volunteers Yes
Key Factors for successful delivery	A good tutor and imaginative options Funding
What would be done differently	More advertising to reach hard to reach groups
Learning Flow	
SEN Children who may benefit most?	8-12, we have delivered sessions to disabled children through Trafford Centre for Independent Living but these were separate to the above sessions
Reports and data	Yes
How is the activity funded?	We need to look for funding from different sources each time we run the project. We have had support from an Awards for All bid in the past to work with RADPAC and also through Play in Nature scheme as part of Rochdale Council. Most recently through Trafford
Photograph	

Who do you see as an Expert?	
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Contact details for more information	Email: k.lowry@tcv.org.uk
	Phone:
	Website:

Reviewers to complete

Assessment	Reviewer 1	Reviewer 2
Learning points That outdoor learning could be encouraged outside school eg during school holidays.	Not enough information given on particular activities that take place during learning sessions. Unclear what aims are of sessions eg are they to develop independent living skills?	“Improvements in confidence, communication skills and knowledge of the natural environment”
Is this best practice	No	Yes/No
If follow-up needed – what information do we need?		Is this “Young Explorers Club” for SEN children? What does it include?
Recommended for inclusion in the toolbox?	No	Yes/No/maybe

Project Name	Outdoorcamp Engelenhoeve
Country	Begium
Delivered by	Mpigo heemschool 1

Age Range	Our children range form 2.5 to 22 years old.
Numbers of children per session	Number of children depends on their level and capabilities. A maximum of 20 children can go each year.
Time required	4 days
What are the non-formal learning benefits for children	Outdoor living, caring for animals, experiencing a form of freedom, adventure(sleeping in tents)
Where does the activity take place?	In St. Denijs (Kortrijk). At the Engelenhoeve
Materials needed	Tents, camp beds, sleeping bags, outdoor gear ...
Description of the activity	Every year is different, We try to make a trip with horse and coach, horse riding, combing the horses, watching and learning about the other animals at the farm: ducks, goats, rabbits, birds ... There is also a small swimming pool, there fore, if the weather is good enough, we swim. We go for longer walks in a green/er surrounding. We make our children experience a different way of living than city-life.
Who leads the activity? Is the leader trained specifically to lead this activity?	No one is trained for this activity, some colleagues and myself organise this little trip every year.
Key Factors for successful delivery	The weather is very important! Motivated educators and enthusiastic children.
What would be done differently	
Learning Flow	Our main goal is not to teach but to give our children a couple of beautifull days where fun and new experiences come first.
SEN Children who may benefit most?	All who participate benefit.
Reports and data	
How is the activity funded?	This activity is mostly for free, we can use the facilities there as we wish. We fund our activities with an annual quiz and barbeque.
Photograph	Due to privacy regulations pictures are not easily available.
Who do you see as an Expert? What sources of information do you use?	I don't really see any experts. The owner of this farmhowever is an expert on horses.

	Email: sofie.swalens@g-o.be
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Contact details for more information	Phone:0032 2 263 63 62
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Reviewers to complete

Assessment	Reviewer 1	Reviewer 2
Learning points		
Is this best practice	Yes/No	Yes/No
If follow-up needed - what information do we need?		
Recommended for inclusion in the toolbox?	Yes/No	Yes/No

Project Name	Building campfire
Country	Belgium
Delivered by	IPO heemschool Beizegemstraat 132 1120 Neder Over Heembeek

Age Range	2.5 -16 years
Numbers of children per session	
Time required	4 days
What are the non-formal learning benefits for children	
Where does the activity take place?	
Materials needed	We do not take too much material with us. The kids play with what the forest offers them. A few meters of rope, a saw, an ax and a wheelbarrow are often sufficient For a whole week of fun.
Description of the activity	<p>During this week we spend every day, all day in nature. Everything happens outside, from food to games. A large part of the week is spent on the building a campfire as large as possible for the farewell evening. The largest and most mobile children, whether or not accompanied gather as much as wood as possible. They learn that the forest can provide them with a lot of materials without damaging the trees or nature. They learn to orientate themselves in the woods and not immediately panic when they are in trouble (lost, alone without an adult).</p> <p>They also learn to enjoy being tired after a whole day of outdoor working and playing.</p>
Who leads the activity?	Educators - scouts
Key Factors for successful delivery	Motivated teachers, speakers, guides. Interesting material and / or activity. Nice weather conditions. The limitations of some of our guests. We are located in Brussels so they enjoy the different environment
What would be done differently	
Learning Flow	
SEN Children who may benefit most?	All types
Reports and data	
How is the activity funded?	By fundraising events organised by our own institution – Service clubs
Photograph	

Who do you see as an Expert? What sources of information do you use?	
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Contact details for more information	Email: jnvrhvt@gmail.com
	Phone:
	Website:

Assessment	Reviewer 1	Reviewer 2
Learning points		
Is this best practice	Yes/No	Yes/No
If follow-up needed – what information do we need?	More details about the specific activities	
Recommended for inclusion in the toolbox?	Yes/No	Yes/No

Project Name	Nature on a plate
Country	Belgium
Delivered by	IPO heemschool Beizegemstraat 132 1120 Neder Over Heembeek

Age Range	2. 5 -16 years
Numbers of children per session	
Time required	3 hours
What are the non-formal learning benefits for children	Exploring outdoors – finding materials
Where does the activity take place?	Forest - classroom
Materials needed	Cardboard plates – materials found in the woods – glue
Description of the activity	With all kinds of materials found in the forest, a ‘dinner’ is put together. The children go in groups to the forest and try to create a ‘plate’ as beautiful and diverse as possible.
Who leads the activity? Is the leader trained specifically to lead this activity?	Educators - teachers
Key Factors for successful delivery	Motivated teachers, speakers, guides. Interesting material and / or activity. The limitations of some of our guests
What would be done differently	
Learning Flow	
SEN Children who may benefit most?	All types
Reports and data	
How is the activity funded?	/

<p>Photograph</p>	
<p>Who do you see as an Expert? What sources of information do you use?</p>	<p>Teachers</p>

<p>Contact details for more information</p>	<p>Email: sofie.swalens@g-o.be</p>
	<p>Phone:</p>
	<p>Website:</p>

Assessment	Reviewer 1	Reviewer 2
Learning points		
Is this best practice	Yes/No	Yes/No
If follow-up needed – what information do we need?	More details about the specific activities	
Recommended for inclusion in the toolbox?	Yes/No	Yes/No

Project Name	Gardening
Country	Belgium
Delivered by	Sint -Elisabethschool voor BO Wijchmaal - Peer

Age Range	From 6 – 10 years
Numbers of children per session	1-8
Time required	Depending on the activity from 15 min – 1 hour
What are the non-formal learning benefits for children	Pupils can experience the peace that overtakes them by working outside in nature. Chickens are a haven of rest and peace during the busy recreations or during peak times through the day.
Where does the activity take place?	Chicken meadow and vegetable garden are on our own school grounds. Other activities are held in a nearby park.
Materials needed	
Description of the activity	Own vegetable garden managed by the pupils. Own chickens meadow. Joining management works in collaboration with Natuurpunt. Survey of water conditions in the domain. (Resterheide)
Who leads the activity? Is the leader trained specifically to lead this activity?	Teachers of the participating classgroups No
Key Factors for successful delivery	The enthusiasm of the teachers involved. Cooperation with organizations such as 'natuurpunt' and accompanying volunteers. Key factors for success are often: the organization, transportation, arranging aids, searching for appropriate activities. Sometimes also the cost of the activity.
What would be done differently	
Learning Flow	
SEN Children who may benefit most?	Children with moderate learning disabilities. Many children have learning disabilities, ADHD, autism, behavioural - and emotional problems.
Reports and data	Yes
How is the activity funded?	Own power
Photograph	
Who do you see as an Expert? What sources of information do you use?	Natuurpunt. Mos op school. Werkgroep ISIS.

Contact details for more information	Email: j.creemers@st-elisabethschool.be
	Phone:

Reviewers to complete

Assessment	Reviewer 1 Jan Verhavert (Heemschool)	Reviewer 2
Learning points		
Is this best practice	Yes/ <u>No</u>	Yes/No
If follow-up needed - what information do we need?		
Recommended for inclusion in the toolbox?	Yes/ No	Yes/No

Project Name	Het ezelpad
Country	Belgium
Delivered by	Kenniscentrum over Ezels en Natuur
Age Range	<ul style="list-style-type: none"> - children between 6 and 12, with or without a restriction - young adults and adults with disabilities - Nature coaching for adults
Numbers of children per session	We have activities for smaller groups (informal) but also individual sessions
Time required	The activity takes at least an hour.
What are the non-formal learning benefits for children	<ul style="list-style-type: none"> - to build trust - to make contacts in a proper way - to treat animals with respect - to learn to respect the pace of someone else - to learn to invite instead of demanding - to learn social skills transfer to their daily fix - to grow a positive self-image
Where does the activity take place?	It takes place on our donkey farm in West-Flanders, Belgium. We plan ecological walks in a hilly region and an adventure forest.
Materials needed	You need a donkey and adequate guidance.
Description of the activity	Asinotherapie. This is the therapeutic use of donkeys in a green environment and focuses on relaxation and the learning of social skills and also acquiring positive experiences/self-image.
Who leads the activity? Is the leader trained specifically to lead this activity?	People from the 'ezelsboerderij' or sometimes with the assistance of internship Animal Care. We aren't trained specifically to lead this activity.
Key Factors for successful delivery	<ul style="list-style-type: none"> - The breathing space literally - The soothing nature of donkeys and green areas - the fact that children can find their own pace - Much is possible as long as there is respect for the animals
What would be done differently	I would like to refine the activity and make specific programs for specific target groups
Learning Flow	
SEN Children who may benefit most?	<ul style="list-style-type: none"> - children with low self-esteem and low self-confidence - children who are having problems with social contacts - children with behavioural and emotional difficulties
Reports and data	
How is the activity funded?	We operate on an independent basis, we acquire no allowances.

<p>Photograph</p>	
<p>Who do you see as an Expert? What sources of information do you use?</p>	<p>The Congress 'Zot van Natuur' gave me a boost to do more. Thanks to them I started with the project 'Nature coaching'.</p>

<p>Contact details for more information</p>	<p>Email: ezelpad@gmail.com</p>
	<p>Phone:</p>
	<p>Website: www.ezelpad.be</p>

Reviewers to complete

Assessment	Reviewer 1 Sint-Gregorius	Reviewer 2
<p>Learning points</p>	<p>-the therapeutic use of donkeys in a green environment</p>	
<p>Is this best practice</p>	<p>Yes</p>	<p>Yes/No</p>
<p>If follow-up needed – what information do we need?</p>		
<p>Recommended for inclusion in the toolbox?</p>	<p>No</p>	<p>Yes/No</p>

Project Name	One mile a day
Country	Belgium
Delivered by	

Age Range	Children between 6 and 12, with or without a restriction
Numbers of children per session	This activity can take place in a small or larger group.
Time required	The teacher chooses the moment. This activity takes just 15 minutes.
What are the non-formal learning benefits for children	Children can improve their energy levels Social interaction with classmates and teachers -to stay in the fresh country air -It provides a better fitness of the children -it encourages the concentration of the children
Where does the activity take place?	This activity can take place anywhere.
Materials needed	Material is not necessary.
Description of the activity	The aim is that the children walk one mile every day. The teacher walked there will be determined where and when. To encourage younger children to this may be dressed.
Who leads the activity? Is the leader trained specifically to lead this activity?	The teacher leads the activity for her class. There is no specific training.
Key Factors for successful delivery	A motivated teacher who can stimulate the pupils to run/walk together.
What would be done differently	
Learning Flow	
SEN Children who may benefit most?	- children with emotional and behavioural problems - children with physical problems - children with ASD
Reports and data	Website: http://www.onemileaday.be Facebook: onemileaday
How is the activity funded?	It isn't.
Photograph	
Who do you see as an Expert? What sources of information do you use?	The physiotherapists or gymnastic teachers at the school. A few times a year we gather with other colleagues physiotherapists and we compare results and interchange experiences.

Contact details for more information	Email:
	Phone:
	Website: http://www.onemileaday.be

	Facebook: onemileaday
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Reviewers to complete

Assessment	Reviewer 1 Sint-Gregorius	Reviewer 2
Learning points	-to run/walk on a daily basis	
Is this best practice	Yes	Yes/No
If follow-up needed – what information do we need?	/	
Recommended for inclusion in the toolbox?	Yes	Yes/No

Project Name	Building Wiglo
Country	Belgium
Delivered by	Sint-Elisabethschool BuBaO Steenovenstraat 20A 3990 Peer
Age Range	In our school we have children of 2.5-13 years. These children have a conduct disorder, socio-emotional problems, autism. We also have the visually impaired and blind, pupils with a weak ability and pupils with learning problems.
Numbers of children per session	The number of children per session is highly dependent on the activity itself.
Time required	The time required for the activity is also highly dependent on the activity itself.
What are the non-formal learning benefits for children	There are children who enjoy the work in the (vegetable) garden. Building a wigloo was hugely appreciated by the students with learning disabilities. A wigloo has the shape of an igloo but is made from willow branches. Collaborating on a project is responsible for developing the social skills. The children are allowed to work with their hands and that is often easier than learning.
Where does the activity take place?	The activities take place mainly in the school, on the playgrounds and in the children's farm on the campus.
Materials needed	The material necessary for the activities is highly dependent on the type of activity. To build a wigloo you need a lot of willow branches.
Description of the activity	The first task consists of removing the side branches, so that the branches are ready for use. Once the floor plan is designed, it's a pretty easy to make the holes for the skeleton of the wigloo. Therefore we use a ground drill. The children can help very well with it and enjoy this activity. To complete the wigloo, the branches need to be connected crosswise to each other. After this intensive work, of course, the branches need a lot of water. And now hope that the willow branches will get carrots and that after a time a living hut appears. Don't forget to give sufficient water and hopefully the children soon will have a new place to play.
Who leads the activity? Is the leader trained specifically to lead this activity?	Sometimes the teachers lead the activities and sometimes the leader is specifically trained to lead the activity. "Natuurpunt" is an organization where you can ask for a guide. To build a wigloo an employee of "Natuurpunt" came with 5 volunteers to the school to work together with the children.

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Key Factors for successful delivery	Sufficient guidance is necessary for everything to go smoothly. Sometimes we also need to organize the movement.
What would be done differently	
Learning Flow	
SEN Children who may benefit most?	
Reports and data	
How is the activity funded?	The costs for the activities are paid by the funds of the school.
Photograph	
Who do you see as an Expert? What sources of information do you use?	An employee of "Natuurpunt" is the expert in this activity and brought 5 volunteers with her.

Contact details for more information	Email: c.paredis@st-elisabethschool.be
	Phone:
	Website: www.st-elisabethschool.be

Reviewers to complete

Assessment	Reviewer 1: Sint Gregorius	Reviewer 2
Learning points		
Is this best practice	Yes/No	Yes/No
If follow-up needed – what information do we need?		
Recommended for inclusion in the toolbox?	Yes/No Building a wigloo	Yes/No

Project Name	“See them growing” (zie ze groeien)
Country	Belgium
Delivered by	BuBaO Sint-Gregorius

Age Range	6 - 13 years old
Numbers of children per session	no limit
Time required	depends on the activity
What are the non-formal learning benefits for children	<p>Cultivating plants, with the fingers rooting in the earth or playing or working in the woods... what can excite and encourage more to join to a green, healthy and cosy environment?</p> <p>The ' them ' in ' see them grow ' can be read in three ways. As: 1) The seeds that grow into full-fledged vegetables and flowers. 2) Pupils who playfully grow in knowledge and love of nature 3) The classroom and by extension the entire school, which thanks to the project evolves to a green, healthy and cosy setting.</p> <p>'See them grow ' is perfectly integrated in the school setting! The project allows on very many areas to develop the knowledge of the students.</p>
Where does the activity take place?	Outside, in the classroom
Materials needed	<p>To integrate the project even better in your teaching, GoodPlanet develops lessons, fun and easy to perform ...</p> <p>With the “growth game”, the growth experiments and the lessons you can work on a healthy and cozy school and you work in the meantime to the curriculum objectives.</p> <p>You can order online your growth box for free you could free and pick it up in a participating Garden Centre. In the box you find materials such as grow jars, compost, seeds, fertilizer ...</p> <p>The website was complemented by interesting tidbits, experiments, ... On a regular basis you get an email with a video message with ideas for your class.</p> <p>Unfortunately, this project is no longer subsidized this year and the growth box will not be developed. Luckily the information of the past projects is still online.</p>
Description of the activity	The goal of this project is to work with the students from your class to make a square meter garden, arts and crafts activities and cooking activities on the basis of video responses.
Who leads the activity? Is the leader trained specifically to lead this activity?	The teacher, provided support by video messages from the project

Key Factors for successful delivery	Funding for the continuation of such a successful project
What would be done differently	
Learning Flow	
SEN Children who may benefit most?	Every child
Reports and data	
How is the activity funded?	They've not been able to get the financial support this year so the project unfortunately cannot grow further. They remain accessible and are already looking forward to make a new start from 1 September 2017.
Photograph	
Who do you see as an Expert? What sources of information do you use?	GoodPlanet

Contact details for more information	Email:
	Phone:
	Website:

Reviewers to complete

Assessment	Reviewer 1: Sint-Gregorius	Reviewer 2
Learning points		
Is this best practice	Yes/No	Yes/No
If follow-up needed – what information do we need?	- Yes	
Recommended for inclusion in the toolbox?	Yes/No	Yes/No

Project Name	Cudv Draga
Country	Slovenia
Delivered by	Cudv Draga, Draga 1 ,lg- Center for training, work and protection for SEN children nad young adults

Age Range	From 11 to 21 years old.
Numbers of children per session	
Time required	Hours? Almost every day.
What do the children learn	Of course, nature has good influenced on everyone and our children are no exception. Specify what they learn.
Where does the activity take place?	Meadows, forests, woodland nature trail walking point, the mini class garden.
Materials needed	Completed.
Running the activity	Walks, hikes for moving. Running training. Learning walks along dealing with different learning this. Observe, listen, gather, playing ...
Is the leader trained specifically to lead this activity?	I, as a class teacher. Team work with a sports teacher, assistants. No, I do not particularly qualify.
Key Factors for successful delivery	Make the children to joy in movement and exploration in nature, show them how to draw attention to the small, small things to be noticed ... working in a team ... good will limits: norms, standards, children are demanding
What would be done differently – what has been learned?	Sometimes it is safer to stay in the classroom.
Learning Flow	3 stage
Children who may benefit most?	Children and young adults with moderate and severe cognitive learning difficulties.
Reports and data	Gain: preparations, reports, observation sheets. Yes
How is the activity funded?	This is public institution; activities are linked to the curriculum.
Photograph	

Contact details for more information	Email: katjusa.skrbec@gmail.com
	Phone:

Assessment	Reviewer 1 Special school Škofja Loka	Reviewer 2: Lynne Ledgard Green Lane School
Learning points	Running activity, Description of activities Key factors	<ul style="list-style-type: none"> • No qualification necessary • Locations - Meadows, forests, woodland nature trail walking point, the mini class garden. • Movement is a theme throughout – active lifestyles
Is this best practice	Yes/No	Yes/No
If follow-up needed – what information do we need?	Specify what they learn, which materials need to prepare, where the activity is in the curriculum, collect reports, observation sheets	<ul style="list-style-type: none"> • The comment “sometimes it is safer to stay in the classroom” – which particular activities are unsafe? What could we do to make them safe? • Which activities can be done in which locations?
Recommended for inclusion in the toolbox?	Yes/No Yes, if missing data are collected	Yes/No

Project Name	Woodland Venture
Delivered by	Inštitut za gozdno pedagogiko/ Institute for Forest Pedagogics
Age Range	These are the children who attend schools for children with special needs, special program and a primary school for children with special needs who are placed in programs based decisions act.
Numbers of children per session	5-10 children
Time required	4-5 hours.
What do the children learn	<p>We see the knowledge out SEN in other "ordinary" schools, at the children that work with us through longer period of time. The fact that visits are not frequent, accompaniment personal development and skills is not possible.</p> <p>The main focus is on situational learning, follow the child and his interests. Activities are planned in the framework of the curricula; usually it is more practical learning of science, but also of other objects in the natural environment. An important part of activity is the movement in natural environments and building independency of children.</p>
Where does the activity take place?	Nearby forest.
Materials needed	The main resource of inspiration is forest (natural environment) and children.
Running the activity	Activities carried out within the framework of regular classes in schools, where we spend the whole morning in the woods. Because we are a non-governmental organization, the number of children and the frequency of visits depend on the demands of schools. It is estimated that 50 children with special needs are included / year, together with them we visit the forest, usually once or twice a year.
Is the leader trained specifically to lead this activity?	Project manager at the institute. No.
Key Factors for successful delivery	The presence of the natural environment, appropriate norms regarding exits in schools, standardization of knowledge, lack of knowledge of the field of non-formal learning, lack of ideas and knowledge, leadership schools, peers do not approve of what you're doing, ensure the safety of children, inflexible curriculum and teachers.
What would be done differently – what has been learned?	The program is still being developed; however, it would be useful to include institutions at the national level, especially the relevant ministries.
Learning Flow	4 stage

Children who may benefit most?	The same as age range box.
Reports and data	No. Supplemented by preparations at/on lessons, if available.
How is the activity funded?	Curriculum or through projects, on a voluntary basis.
Photograph	If available

Contact details for more information	Email: info@gozdnivrtec.si
	Phone:
	Website: http://www.gozdnivrtec.si/sl/

Reviewers to complete

Assessment	Reviewer 1 Special school Škofja Loka	Reviewer 2 Lynne Ledgard Green Lane School
Learning points	The programs that carried out by the Institute.	<ul style="list-style-type: none"> • Activities are planned in the framework of the curricula • Communication with colleagues regarding benefits to ensure respect and cooperation • Inflexible curriculum is a barrier.
Is this best practice	Yes/No	Yes/No
If follow-up needed – what information do we need?	It is necessary to describe the specifics of the organization and describe more closely the programme that is best for the SEN children (if any), that would be a good example for the toolbox	<ul style="list-style-type: none"> • Which curriculum areas are covered? Examples of activities linked to each area
Recommended for inclusion in the toolbox?	Yes/No	Yes/No

Project Name	Forest of Experiments
Country	Slovenia
Delivered by	Gozdarski inštitut Slovenije/Slovenian Forestry Institute

Age Range	4 th , 5 th and 6 th grade of primary school, deaf and hearing impaired children
Numbers of children per session	10-15
Time required	3 hours
What are the non-formal learning benefits for children	Too short program to be monitored.
Where does the activity take place?	Forest or park
Materials needed	Natural materials found in forest or park.
Description of the activity	Natural Science Days for children with special needs, 2-3x per year, 1 class of children from (primary) school.
Who leads the activity? Is the leader trained specifically to lead this activity?	Researchers No
Key Factors for successful delivery	The competence of performers Communication and exchange of knowledge with teachers It is important to share best practices with each other that all we know and learn more.
What would be done differently	We should better educate performers.
Learning Flow	3 stage
SEN Children who may benefit most?	4 th , 5 th and 6 th grade of primary school, deaf and hearing impaired children
Reports and data	Yes
How is the activity funded?	Through projects.
Photograph	

Contact details for more information	Email: ursa.vilhar@gozdis.si
	Phone: + 386 1 200 78 46
	Website: http://www.gozdis.si/gozd-eksperimentov/ http://www.gozdis.si/o-institutu/zaposleni/?id=66

Reviewers to complete

Assessment	Reviewer 1	Reviewer 2 Lynne Ledgard Green Lane School
Learning points		<ul style="list-style-type: none"> Those leading the session are not specifically trained but it is felt they should be Communication and exchange of knowledge

		<p>with teachers is a key factor to ensure respect and cooperation</p> <ul style="list-style-type: none"> • Materials used are those found naturally in the woods/forest
Is this best practice	<p>Yes/No</p> <p>Yes, if activities are described more precisely</p>	Yes/No
If follow-up needed – what information do we need?	<p>A more detailed description of the activity. To complement duration of activity, what material is needed</p>	<p>More detail about specifics of activity</p>
Recommended for inclusion in the toolbox?	Yes/No	Yes/No

Project Name	
SloCountry	Slovenia
Delivered by	Osnovna šola Gustava Šiliha Maribor

Age Range	All
Numbers of children per session	
Time required	
What are the non-formal learning benefits for children	We're trying to explain them, why certain environments are crucial to our everyday lives. Some pupils grasp and understand some can not.
Where does the activity take place?	Around the school, where you can reach on foot.
Materials needed	
Description of the activity	Lessons in nature are carried out, as far as our circumstances permit. We have activity days, a special program has also daily walks. The younger pupils are, more of this lessons in nature can be realized through school program. Special programm of education has more opportunities.
Who leads the activity? Is the leader trained specifically to lead this activity?	Teacher No
Key Factors for successful delivery	Weather - that pupils feel comfortable, suitable footwear and clothing, the prior preparation of pupils. Curriculum-overcrowded. Despite the fact that pupils learn about the nature around us, no long-term memory.
What would be done differently	We should spend more time specific in nature.
Learning Flow	1 stage
SEN Children who may benefit most?	All
Reports and data	No.
How is the activity funded?	Part of basic education.
Photograph	
Who do you see as an Expert? What sources of information do you use?	Textbooks for major primary schools and manuals for specific topics

Contact details for more information	Email:tanjatonejc@gmail.com
	Phone:
	Website:

Reviewers to complete

Assessment	Reviewer 1 Special school Škofja Loka	Reviewer 2 Lynne Ledgard Green Lane School
Learning points		<ul style="list-style-type: none"> • Relevance and link to real life is emphasised • Outdoor learning facilitated through activity days and daily walks – more opportunities for younger children within curriculum. It is felt that not enough time is dedicated. • Suitable clothing is key – cost factor??
Is this best practice	Yes/No - Only the description of the activities from the curriculum.	Yes/No
If follow-up needed – what information do we need?	A more detailed description of the activity. To complement duration of activity, what material is needed	More details regarding activities and more detail regarding age/ability groups.
Recommended for inclusion in the toolbox?	Yes/No	Yes/No

Project Name	Forest Monday
Country	Slovenia
Delivered by	OS Roje, Kettejeva 15, 1230 Domžale

Age Range	Children and young adults from 7- 26 years, with moderate and severe cognitive disorders, which are included into special programme of education.
Numbers of children per session	7 pupils
Time required	<p>Almost every day we take, during learning lessons (physical education or developing autonomy or general hour –math, language or environmental learning), a short time walk near by the closest river called Kamniška Bistrica (1 hour).</p> <p>Once monthly we visit forest or near Arboretum within a school project “Forest Monday” and we stay there for the whole morning (5 hours).</p>
What are the benefits for children	<p>We notice that pupils prefer to handle with natural materials (they touch and colour branches or forest fruits, ...). They relax and play and let to have hands dirty of mud and soil into the forest. They are very interested in collecting forest fruits. Some of them made a big progress in learning skills (counting till 3 or 5).</p> <p>Some pupils feels more comfortable into the forest, but some of them gets more confused, because it is not so structured environment.</p> <p>I also see that the forest is very good environment for improving gross motor skills, because pupils need to walk on a rough terrain, with many branches on it. At first they were confused, they needed help and support, now they are much more self-confident with this obstacles.</p> <p>Pupils are progressing on emotional (self-esteem), social and cognitive field. We learn in an interesting way, pupils shows more motivation for learning.</p> <p>Pupils can experience learning by all sensory channels. I found out that the most important is for pupils calming down into the natural environment so they are more aware of surrounding, gets more information.... I can see that they benefit the most by handling with natural materials.</p>
Where does the activity take place?	Activities takes place on the school`s backyard, garden, nearest meadow, during the walks near by the river Kamniška Bistrica, into the forest, in Arboretum.
Materials needed	To be completed
Details about the activity – how is it run?	We run different activities – depends on the season and learning topics in the curriculum. We collect plants, vegetation and make sculptures (fine and gross motor skills), we count, read stories, we sing

	and play on the natural musical instruments, we also do physical exercises, we learn how to listen and we enjoy the silence, we learn about the forest animals and plants,...In this programme are involved all pupils which visits special programme of education at our school, though they not visit the forest all at once.
Is the leader trained specifically to lead this activity?	The leader is teacher – class teacher; under the direction of project leader; No, not specifically trained.
Key Factors for successful delivery	Willingness of the teacher, supportive parents and headteacher. Specific problems of our children (our pupils are not self-initiative, they do not investigate by themselves), which dictates a large number of assistants and also weather conditions. Certainly, it would be good, that we exchange information, so the teachers can get new ideas.
What would be done differently	Access to the nature (it takes us a lot of time, so we cannot go in the forest every day), financing of transport, physical disability of pupils. And we have not enough assistants for pupils, so we cannot go to the forest more often. Maybe we should be more systematically focused on a development of certain skills.
Learning Flow	4 stage
SEN Children who may benefit most?	Pupils with moderate and severe cognitive disorders, pupils with autistic spectrum disorders, physical disabled pupils.
Reports and data	Yes.
How is the activity funded?	The activity is part of our national curriculum and it is not extra funded. We have one of the topics in the curriculum forest and forest fruits. Otherwise, our school is involved in several other projects as Forest Monday, Eco- Schools, School Eco Garden, ...
Photograph	

Contact details for more information	Email1: soncnice@gmail.com
	Email2: sever.nina@gmail.com
	Phone:

Assessment	Reviewer 1 Special school Škofja Loka	Reviewer 2 Lynne Ledgard Green Lane School
Learning points		<ul style="list-style-type: none"> • Pupils enjoy sensory element • Active lifestyles benefits • Lack of structure makes some pupils confused. Do we need to include a certain level of structure to make SEN pupils feel secure? • No specific training

		<ul style="list-style-type: none"> • High levels of staffing necessary and can be a barrier
Is this best practice	Yes/No	Yes/No
If follow-up needed – what information do we need?	Time required (more specifically), Materials needed,	
Recommended for inclusion in the toolbox?	Yes/No	Yes/No

Project Name	Permaculture learning in green learning environments
SloCountry	Slovenia
Delivered by	OS Cvetka Golarja, Golarjeva 6, 9240 Ljutomer/special school

Age Range	6 – 22 years old (children with mild, moderate and severe cognitive disorder, some of them in combination with other disorders)
Numbers of children per session	Whole division; sometimes also 2 sections or more, divided in multiple groups (in this way the whole school can participate in the activity)
Time required	2 school hours per week (less in winter time, more in summer)
What are the non-formal learning benefits for children	<ul style="list-style-type: none"> - Improving motor and coordination skills - Gaining concrete knowledge - Better connectedness between concrete and theoretical knowledge - Improving learning motivation - Better observation and listening abilities - Higher endurance? / Perseverance? for activities -
Where does the activity take place?	School garden and forest, sometimes meadow and fields
Materials needed	<ul style="list-style-type: none"> - Sport requisites - Depends on the topic of school subject: materials for science, maths, language, art and extracurricular activities -
Description of the activity	Class outdoor, class walk (learning in the nature during the walk around on certain topic), activity days, project work, continual development project (a lot of activities in the nature)
Who leads the activity? Is the leader trained specifically to lead this activity?	The leader is teacher, who works in the class. No
Key Factors for successful delivery	Green learning environment, natural materials, a lot of movement, multisensory learning. Enough time for these activities. Outdoor activities led by several coworkers for gaining more interconnected experiences.
What would be done differently	The problem is lack of time – we would get better results if we weren't attached to class hours and timetables. More accurate planning of activities in intersubject connecting.
Learning Flow	4 stage
SEN Children who may benefit most?	No information
Reports and data	Slovenian report (call for good practises)
How is the activity funded?	Part of basic education, partly funded by the project

Photograph	Some photos are on the report for good practices.
Who do you see as an Expert? What sources of information do you use?	Permaculture learning and development (literature and recommendations of the permaculture), permaculture topic learning

Contact details for more information	Email: alenka.zmauc@gmail.com
	Phone:
	Website:

Assessment	Reviewer 1 Special school Škofja Loka	Reviewer 2 Reviewer 2 Lynne Ledgard Green Lane School
Learning points	Benefits for children, Key factors, Description of the activity	<ul style="list-style-type: none"> • No specific training for staff • Benefits include Improving motor and coordination skills, perseverance • Multisensory approach • Constraints of timetable and curriculum is a barrier • GLE links to curriculum benefits planning
Is this best practice	Yes/No If they choose and describe one activity (preferably permaculture) in detail.	Yes/No
If follow-up needed – what information do we need?	A more detailed description of one activity, Information about the leader trained in permaculture learning, Children who may benefit most, Collect reports and data.	
Recommended for inclusion in the toolbox?	Yes/No	Yes/No

Project Name	
Delivered by	OŠ GLAZIJA CELJE

Age Range	Children with special needs – ranged from 7 to 26 years old
Numbers of children per session	
Time required	School in the nature, hiking club, learning walks, horse therapy, dog therapy
What are the benefits for children	Children become more independent, they are in better physical condition, socially more mature
Where does the activity take place?	Facilities of our center (CSOD), schoolyard, forest, garden...
Materials needed	
Details about the activity – how is it run?	School in the nature, hiking club, learning walks, horse therapy, dog therapy
Is the leader trained specifically to lead this activity?	Professional staff of our center, teachers, educators... yes
Key Factors for successful delivery	Change of the environment, objects of natural environment, children are forced to spend some time without their parents, observing classmates Lack of finances Developing independence, strengthening social bonds, widening the understanding of the nature, perceiving nature with various senses, developing a positive attitude towards movement, nature... they are strengthening their own body
What would be done differently	There is a lot of ideas, but the main problem is financing , transportation, food, staff, accommodation, equipment...
Learning Flow	2 stage
SEN Children who may benefit most?	Are there children with particular conditions that this activity has been designed/delivered for? Children with special needs – ranged from 7 to 26 years old
Reports and data	Yes
How is the activity funded?	National co-funding, sponsors, school fund...
Photograph	If available

Contact details for more information	Email: marjana.sah@guest.arnes.si
	Phone:
	Website:

Assessment	Reviewer 1 - prof. Marijana Šarić	Reviewer 2
Learning points		
Is this best practice	Yes/No	Yes/No
If follow-up needed – what information do we need?		
Recommended for inclusion in the toolbox?	Yes/No	Yes/No

Project Name	
Delivered by	Zveza Sožitje, zveza društev za pomoč osebam z motnjami v duševnem razvoju Slovenije

Age Range	We are involving children and adults with intellectual disabilities
Numbers of children per session	
Time required	In our family programs we are including visits to the nature (also practical work in natural environment), we are performing activities outdoors using natural materials, we are also organizing all-week camping. Because this is not just one specific program, we cannot provide numbers of participants. Note: in the Lifelong Learning Programme are involved only adults with intellectual disabilities.
What are the benefits for children	We are mainly working with adults with intellectual disabilities and monitoring their progress in the field of personal development, acquisition of skills and knowledge through our programs. Here we see improvements in all areas. Children are part of our programs mainly on family programs, where is less activities performed in natural environment (contrary as in the lifelong learning programs for adults where this is possible).
Where does the activity take place?	Depending on the sub-programs, which take place throughout Slovenia. Here are some examples: meadows, the river, the sea, beaches, parks, mountains, farms, gardens, forests, equestrian center, meadows with medicinal plants ...
Materials needed	
Details about the activity – how is it run?	In our family programs we are including visits to the nature (also practical work in natural environment), we are performing activities outdoors using natural materials, we are also organizing all-week camping. Because this is not just one specific program, we cannot provide numbers of participants. Note: in the Lifelong Learning Programme are involved only adults with intellectual disabilities.
Is the leader trained specifically to lead this activity?	Program leaders and companions (no one is not specifically defined based on knowledge of performing outdoor activities, but they are especially trained to work with persons with intellectual disabilities. No
Key Factors for successful delivery	Sometimes it is difficult to provide the necessary care and assistance in natural environment, or the place is difficult to access for some participants (due to specific health problems). Qualified personnel, the gradual approximation of the nature to the participants
What would be done differently	
Learning Flow	2 stage

SEN Children who may benefit most?	Are there children with particular conditions that this activity has been designed/delivered for? We are involving children and adults with intellectual disabilities
Reports and data	Yes
How is the activity funded?	Activities are included in our existing programs and they are not part of the independent funding.
Photograph	

Contact details for more information	Email: mateja.turk@zveza-sozitie.si
	Phone:
	Website:

Assessment	Reviewer 1 - prof. Marijana Šarić	Reviewer 2
Learning points		
Is this best practice	Yes/No	Yes/No
If follow-up needed – what information do we need?		
Recommended for inclusion in the toolbox?	Yes/No	Yes/No

Process

1. Sift for examples of best practice
2. Populate template from Survey Monkey questionnaire
 - a. Translate where necessary
3. Follow up data and reports
4. Allocate examples to partners – Reviewer 1
5. Identify reviewer 2 – ideally in another country
6. Collate all
7. Send to the organisation that provided the example for “approval” and improvement

Project Name	Innovative project Forest Monday
Delivered by	Kindergarten Najdihojca; Ljubljana

Age Range	Children begin to attend forest when they are older than three years (we don't have a forest near the kindergarten) Forest has extremely positive effect on children who have too much energy, and it also activate those children who are very passive.
Numbers of children per session	The number of children in the group, usually about 20 children.
Time required	From 2011, in our kindergarten we have implemented the innovative project which has moved into good practice entitled 'Cohabitation with trees.' During the project there were involved 260 children, and later, it is estimated that many children regularly or at least once a month visit the forest.
What are the benefits for children	Yes, definitely. Through regular visits of the forest children can develop physical skills, which are in the preschool children in the forefront, because through these feelings children arousing feelings of confidence in their body. In all of physical activities children autonomy decide how far is it willing to go – he autonomy assess, if he can climbed the steep hill or not... So during the activity he can develop self-confidence and a positive self-image. Empty and quiet place allow child to listen to their impulses and desires.
Where does the activity take place?	Many times we visit Šentvid forest, park Tivoli, Mostec, as well as long walks: Ljubljansko barje, Rašica, Šmarna gora.
Materials needed	No special materials and devices we use what is found in nature.
Details about the activity – how is it run?	<p>From 2011, in our kindergarten we have implemented the innovative project which has moved into good practice entitled Cohabitation with trees. During the project there was involved 260 children, and later, it is estimated that many children regularly or at least once a month visit the forest.</p> <p>In the warmer part of the year our two groups (Eaternia 1 & Eaternia 2) visit the forest at least once a week. In winter, at least once a month. Usually we go to forest by bus, so that children can actively spend as much time in the woods. In the forest we do not run out of activities, children mostly find themselves suitable game (intrinsic motivation for learning) in which they are interested, but we also can prepare thematic day, for example – go across the seven bridges, let's build dwarf house, wander through Ljubljana Barje...</p>
Is the leader trained specifically to lead this activity?	Educators in the kindergartens. No.
Key Factors for successful delivery	Educator willingness to take children into the forest.

	<p>Greater confidence in the nature, working on personal attitudes of professionals, acquiring some funds ...</p> <p>My belief is extremely positive. I believe that attending the forest has huge potential and it is a great source of inspiration for the work ahead. Yes, I am willing to present our work to others.</p>
What would be done differently	We may present the project work in the woods more often – to our colleagues or and also to the general public.
Learning Flow	4 stage
SEN Children who may benefit most?	Forest has extremely positive effect on children who have too much energy, and it also activate those children who are very passive.
Reports and data	Yes.
How is the activity funded?	Innovation project has moved into good practice. We have received some of the funding at the municipal level through the project Zelena prestolnica (Green Capital).
Photograph	

Contact details for more information	Email: alenka.krajnc1@gmail.com
	Phone:
	Website: http://www.najdihojca.si/

Assessment	Reviewer 1 - prof. Marijana Šarić	Reviewer 2
Learning points		
Is this best practice	Yes/No	Yes/No
If follow-up needed – what information do we need?		
Recommended for inclusion in the toolbox?	Yes/No	Yes/No

Project Name	
Delivered by	Eternia, Association to help young people with intellectual behavior (ADHD)

Age Range	The age range of children is from 6 to 14 years.
Numbers of children per session	In summer camps are involved 100 children - two groups of 50 children. In each workshop includes a maximum of 5 children.
Time required	Camps and workshops are throughout the whole day.
What are the benefits for children	Concentration improvement, attention and tranquillity.
Where does the activity take place?	Forest, meadows, seaside.
Materials needed	Equipment for a camp, and devices for carrying out the activities of experiential pedagogy.
Details about the activity – how is it run?	Based on experiential pedagogy. Activities in the camp is intended to learn about nature, ancient skills they cook, build, paint, write, and knit, conducted exercises for motor skills and at the same time given a strong emphasis on psychosocial games, advice and techniques for getting to know the best of their potential.
Is the leader trained specifically to lead this activity?	Yes. Camps leading mentors pedagogues in the field of social pedagogy, psychology, health. Relationship between adults and children is 50:40.
Key Factors for successful delivery	Appropriate approach and appropriate individuals. The program operates within the framework of the Association and the Institute of Eternia Rainbow Warriors.
What would be done differently	The programme is continually being improves.
Learning Flow	4 stage
SEN Children who may benefit most?	ADHD, Autism, Tourette syndrome, Asperger syndrome
Reports and data	Yes
How is the activity funded?	Own funds, user's contribution and projects.
Photograph	

Contact details for more information	Email: adhd.slovenija@mail.com
	Phone:
	Website: www.mavricnibojevniki.org

Assessment	Reviewer 1 – prof. Marijana Šarić	Reviewer 2
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Learning points	We done interview with leader Dejan Sotirov.	
Is this best practice	Yes/No	Yes/No
If follow-up needed - what information do we need?		
Recommended for inclusion in the toolbox?	Yes/No	Yes/No

Project Name	
Delivered by	OŠ Antona Žnideršiča Rozmanova 25 b 6250 Ilirska Bistrica

Age Range	Children in the age range from 10-15 years old. These are children who are attending adjustable program.
Numbers of children per session	
Time required	We are mostly talking about thematic days (natural day, sports day) and school in the nature which is carried out once a year for 3-5 days. Every year we organize 3-5 natural days and sports days. In those days are included all the children of the adjusted program.
What are the benefits for children	Knowledge that they acquire in the nature in unparalleled and remain longer in the memory of the children.
Where does the activity take place?	forest, garden, seaside
Materials needed	
Details about the activity – how is it run?	We are mostly talking about thematic days (natural day, sports day) and school in the nature which is carried out once a year for 3-5 days. Every year we organize 3-5 natural days and sports days. In those days are included all the children of the adjusted program.
Is the leader trained specifically to lead this activity?	teachers no
Key Factors for successful delivery	finances finances socializing and getting to know themselves and others, and of course the dissemination of knowledge in a natural environment
What would be done differently	I would give as much of these activities as possible
Learning Flow	Where does the activity sit on the learning flow?
SEN Children who may benefit most?	Are there children with particular conditions that this activity has been designed/delivered for? Children in the age range from 10-15 years old. These are children who are attending adjustable program.
Reports and data	no
How is the activity funded?	part of curriculum
Photograph	

Contact details for more information	Email: irena.muha@guest.arnes.si
	Phone:
	Website:

Assessment	Reviewer 1 - prof. Marijana Šarić	Reviewer 2
Learning points		
Is this best practice	Yes/No	Yes/No
If follow-up needed – what information do we need?		
Recommended for inclusion in the toolbox?	Yes/No	Yes/No

Project Name	
Country	Slovenia
Delivered by	Elementary school Ivan Cankar Vrhnika, Lošca 1, 1360 Vrhnika. Branch School with a Special program with lower educational standard and with special programmes

Age Range	Children with special needs from aged 6 to 19
Numbers of children per session	10-16
Time required	half of the day, whole day
What are the non-formal learning benefits for children	We note that their perseverance strengthens by overcoming effort, which is reflected in the school situation. Non-formal way of learning is more effective, since many children with learning experiences in the classroom distress, have poor attention and are restless. There's significantly less of this in nature. With outdoor activities they confirm and reinforce self-esteem.
Where does the activity take place?	School surrounding environment-park, marshes, forest, mountain, hill, urban environment, beach, karst caves.
Materials needed	
Description of the activity	We comprise 10 to 16 children with special needs-children with intellectual disabilities (mild intellectual).! Once a month in the context of extracurricular activities we have on Saturdays or Fridays afternoon activities which are exclusively linked to the external environment (forest, meadow, coast, mountains, underground world ... and the urban environment). The project School for Life program is carried out once a year on the coast. We carry out inertia walking, physical and social games, thematic learning associated with learning content in natural sciences and social sciences. In nature all the time we spend our gatherings, since this is the purpose of our activities.
Who leads the activity? Is the leader trained specifically to lead this activity?	Mentors. No.
Key Factors for successful delivery	Experiencing in nature is completely different from the experience of the classroom, they do not feel that this is learning, they learn constantly, unknowingly, with the experience and socializing with others. It does not limit them space and demands for silence. Learning takes place in all the sensory pathways with a lot of movement and fresh air. General organization of the school system, understaffed-norms. Children who are in some way wounded-school children who come because of academic failure in our program have seeded a lot of emotional and behavioral problems, while learning in the classroom again experiencing hardship. Their teaching self-esteem is extremely weak, so it is for them a very important experience, in the context of the school may unknowingly acquire positive experiences with

	themselves and learning, which in turn has a positive effect on formal learning.
What would be done differently	Initially we overestimate physical abilities of children. Our expectations for the support of parents were too large, the parents initially in these activities have not seen such interest as us. We were rarely in the context of our school presented the content of the program.
Learning Flow	4 stage
SEN Children who may benefit most?	Most children are children with mild and moderate mental disabilities and combined motnjami- speech and language, emotional, behavioral and motor disorders.
Reports and data	Yes.
How is the activity funded?	Children pay the costs, the costs of us mentors are covered in mostly from our own resources. Hours dedicated to these activities shall be considered in the realization of, or the additional paid in the context of extracurricular activities.
Photograph	
Who do you see as an Expert? What sources of information do you use?	References in the field of experiential pedagogy, Montessori pedagogy and literature in the development of social skills, principles of Scouting.

Contact details for more information	Email: nbede@11sola.si
	Phone:
	Website:

Assessment	Reviewer 1 - Natalija Gyorek	Reviewer 2
Learning points		
Is this best practice	Yes/No	Yes/No
If follow-up needed - what information do we need?	Materials, photos	
Recommended for inclusion in the toolbox?	Yes/No	Yes/No