

LEVEL 3 CERTIFICATE FOR FOREST SCHOOL LEADERS
LEVEL 2 CERTIFICATE FOR FOREST SCHOOL ASSISTANTS
TRAINEE HANDBOOK



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WELCOME, CONTACT DETAILS & SUPPORT

Welcome to The Hive Forest School Training Course.

This handbook includes a wealth of information to support you throughout the course: you will find a reading list, an overview of the curriculum, handouts for all units, detailed guidance on the development of your portfolio and a summary of what to expect on assessment days.

We are also here throughout the process to answer questions, provide support and help in any way we can, so do feel free to get in touch if you're worried about any aspect of the course or would just like a sounding board on your practical skills, portfolio or assessment days! Remember that as part of the course, you have access to your tutor beyond the face-face guided training and assessment days.

We're very much looking forward to supporting you on your Forest School journey. Caroline & The Hive team

Contact details

Lauren Sudders

Email: <u>lauren@thehive-kids.com</u> Telephone: 020 3435 6848

Process for submissions

- All submissions must be sent via email or WeTransfer to submissions@thehive-kids.com.
- Submissions <u>must</u> include the following in both the subject line and document/folder title:
 - Your Name
 - Which submission you are sending (i.e. First Draft, Second Draft, Final Portfolio)
 - What you are sending (i.e. Units 1, 3 and 4 & Handbook)
- Submissions should be sent in *one transfer or email*. Please do not send multiple transfers for separate units.

Student Hub

https://sites.google.com/thehive-kids.com/forestschoolstudenthub/



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YOUR FOREST SCHOOL TRAINING TIMETABLE

If you are studying towards the **Level 3 Certificate**, you have **12 months** to complete the course and submit your portfolio.

If you are studying towards the **Level 2 Certificate**, you have **6 months** to complete the course and submit your portfolio.

Timetable for Level 3 Certificate

Cours	e Start Date			
1	Attend 5 days of face-to-face training with your Hive tutor			
2	Lead and document 6 Forest School Sessions			
3	Hand in your draft Forest School Handbook			
4	Attend 4 days of face-to-face assessment			
5	Hand in your Portfolio Draft 1			
6	Hand in your Portfolio Draft 2			
7	Submit your final Portfolio			
	deadline to finish the course (if you do not manage to meet nal portfolio deadline.			

Timetable for Level 2 Certificate

Cours	e Start Date	
1	Attend 5 days of face-to-face training with your Hive tutor	
2	Support and document 3 Forest School Sessions	
5	Hand in your draft Portfolio	
6	Submit your final Portfolio	
	deadline to finish the course (if you do not manage to meet nal portfolio deadline.	



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RECOMMENDED READING LIST

MUST HAVE BOOKS

"Learning with Nature" by Marina Robb Published by Green Books

"Forest School for All" by Sara Knight Published by Sage

"Play the Forest School Way" by Jane Worrol and Peter Houghton Published by Watkins Publishing

OTHER RECOMMENDED BOOKS

"No Fear; Growing up in a Risk Averse Society" by Tim Gill Published by CGF

"Let's Go Outside" by Steph Sco and Kae Akers Published by Batsford

"101 Things for Kids to do Outside" by Dawn Isaac Published by Kyle Books

"The Sck Book" by Jo Schofield and Fiona Danks Published by Frances Lincoln Ltd

"Games, ideas and activies for Primary Outdoor Learning" by Paul Barran Published by Pearson

"Dirty Teaching. A beginner's guide to Learning Outdoors" by Juliet Robertson Published by Independent Thinking Press

"A Year of Forest School" by Jane Worrol and Peter Houghton Published by Watkins

"Balanced and Barefoot" by Angela J. Hanscom Published by New Harbinger



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"Last Child in the Woods: Saving our Children from Nature deficit Disorder" by Richard Louv Published by Atlantic Books

"Free to Learn" by Peter Gray Published by Ingram

FLORA AND FAUNA BOOKS

"Collins Complete Guide to British Birds" by Paul Sterry Published by Collins

"Birds or Britain and Europe" by J.Nicolai, D.Singer and K.Wothe Published by Collins

"Collins Complete Guide to British trees" by Paul Sterry Published by Collins

"Trees in Britain, Europe and North America" by Roger Phillips Published by Pan Books

"Mushrooms and Toadstools of Britain and Europe" by Edmund Garnweidner Published by Collins

"Collins Nature Guide - Butterflies and Moths" by H.Hofman and T. Marktanner Published by Collins

"Brish Wildlife: A photographic guide to every common species" by Paul Sterry Published by Collins

"Garden Wildlife of Britain and Northern Europe" by Michael Chinery Published by Collins



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RECOMMENDED STARTER KIT LIST

ltem	Quantity (per 8 pupils)	Must Have / Nice to Have
FIRE MAKING ACTIVITIES		
Vaseline	1 small tub	MH
Cotton balls	1/2 bag per session	MH
Fire gloves	2 pairs	MH
Fire blanket	1	MH
Matches	1 box of long matches	MH
Bucket	1	МН
Fire bowl	1	МН
Kindling	4 bags	MH
Firewood	1 large bag	MH
Scallop shells	4 for group of 8	МН
Charcloth	1 bag	NTH
King Alfred's cakes	1 bag	NTH
COOKING ACTIVITIES		
Fire grill	1	MH
Metal skewers	8	MH
Kelly kettles	2	MH
Skillet	1	NTH
Dutch oven	1	NTH
Zebra Billiy cans	2	NTH
Teapot	1	NTH
Drinking cups	One per child	МН
Cutlery	Container	МН
Cutting knife	1	МН
BBQ tongs	1	NTH
Popcorn maker	1	NTH
Wooden spoons	4	МН
Kitchen foil	1 large roll	МН
Washing up liquid	1	МН
Plastic plates	One per child	МН



Plastic bowls	4	МН		
Washing up bowl	1	MH		
Sponges	1	MH		
Tea towels	1	MH		
Chopping board	2	МН		
WHITTLING ACTIVITIES				
Sheath knives	4	MH		
Potato peelers	4	MH		
Sharpening stone	1	MH		
Billhooks	2	MH		
Rigger gloves	8 pairs	MH		
Mallet for billhook	2	MH		
Bow saw	2	MH		
Pruning saw	1	MH		
Loppers	1	MH		
Rotary hand drill with drill bits	1	NTH		
Palm drills	4	MH		
Secateurs	2	MH		
SHELTER BUILDING ACTIVITIES				
Tarps	2	MH		
Groundsheet	1	NTH		
Paracord	1 roll	MH		
Lighter	1	NTH		
Tent pegs	1 bag	MH		
Mallets	4	MH		
Sitting mats	One per participant	MH		
Logs to sit on	One per participant	NTH		
ARTS & CRAFTS ACTIVITIES				
Ropes for swings	10 meters	MH		
Twine	2 balls	MH		
String	2 balls	MH		
Wool	1	NTH		
Paint brushes	8	MH		
Pestle & Mortar	2	NTH		
Plastic pots	8	MH		
		_		



Clay	1/4 bag	NTH
Small scissors	8	MH
Chalk	1	NTH
Pigments	1	NTH
FIRST AID		
First aid kit	1	MH
Hand wash	1	MH
GAMES		
Blindfolds	4	NTH
Balls	2 medium sized balls	NTH



UNIT 1

FOREST SCHOOL PROGRAMME: DELIVERY





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UNIT 1: FOREST SCHOOL PROGRAMME DELIVERY HANDOUT 1: FOREST SCHOOL SESSION PLAN TEMPLATE

As much as possible, Forest School sessions should be child-led and free-flowing, and lesson plans need to reflect that by being more fluid than traditional lesson plans.

The idea is to make notes to help you structure your session and encourage you to think about what you are planning to do, what experiences you will offer your learners and the impact you may have.

1	What is the theme for the session?	
	How does it fit in with previous / forthcoming themes?	
	What are your learning objectives for this session?	
4	What sequence could your activities follow? • Activity 1 • Activity 2 • Activity 3 • Activity 4 • Etc.	



	How could you differentiate these activities?	
	What health & safety considerations should you keep in mind?	
7	What resources, equipment and tools will you need?	
8	What opportunities are there for reflection?	



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LEVEL 3 - UNIT 1: FOREST SCHOOL PROGRAMME DELIVERY HANDOUT 2: PARTICIPATION & OBSERVATION IMPACT FORM

Name of Child:

Child Observation	n Form	Score 0 – 5	(0 being lowes highest)	t 5 being
Area of Development	Skills	Before Week 1	Week 3	Week 6
Self-esteem	Happy to take risks			
and confidence	Able to speak up for themselves			
	Wanting to try something new			
	Aware of own needs			
	Able to tolerate obstacles to fulfilling tasks			
	Able to lead group in tasks			
Social Skills	Able to work in a team			
	Able to wait and take turns			
	Able to form relationships			
	Contributing to group discussions			
	Total			



Child Observation	Form	Score 0 – 5	(0 being lowest highest)	t 5 being
Area of Development	Skills	Before Week 1	Week 3	Week 6
Language and Communicatio	Able to share ideas with a friend			
n	Able to take turns to speak			
	Listening to instructions			
	Holding eye contact			
	Responding to stories, songs and poems			
Motivation and Concentration	Excited and interested in activities			
	Able to take time to perfect a task			
	Maintaining attention			
	Asking questions during a task			
	Total			



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Child Observation Form		Score 0 – 5 (0 being lowest 5 being highest)		
Area of Development	Skills	Before Week 1	Week 3	Week 6
Physical	Able to move around on uneven ground			
	Has physical stamina			
	Has spatial awareness			
	Aware of physical space of self and others			
	Able to climb up onto trees and grip branches			
	Total			
	Overall total of all areas			

Summary of child's abilities/strengths/areas of development

Before Week 1	Week 3	Week 6



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UNIT 1: FOREST SCHOOL PROGRAMME DELIVERY HANDOUT 3: FOREST SCHOOL LEADER REFLECTION ON PRACTICE

THINKING POINTS FOR REFLECTION DIARY

You can complete your reflection diary using any method that feels meaningful and purposeful. This may take the form of an actual diary or illustrated scrapbook but you can also use other methods, such as video clips, a blog, a podcast or photo diary.

You should complete a reflection after each of your six Forest school sessions but you could also complete additional reflections when you're practising your practical skills e.g. tool use, fire building etc.

Here are some key questions and thoughts that you might find helpful when completing your reflection diary.

- Include a summary of what happened during each Forest school session
- What were the memorable 'magical' moments from the session?
- What kind of reactions did you observe from the children in the group?
- Did any of the children say anything that captured their thoughts and feelings about the session?
- What role did you play during the session?
- Is there anything you would have done differently in this session?
- What will you plan for the next session?
- What were the key learning points for you as a Forest school leader from this session?



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UNIT 1: FOREST SCHOOL PROGRAMME DELIVERY HANDOUT 4: PUPIL EVALUATION FORM

The following provides guidance on the type of evaluation you can carry out with the children attending your Forest School sessions.

Your approach will need to be adapted, based on their age, ability to give feedback and the specifics of the setting in which you work.

This type of evaluation is usually carried out at the end of a block of Forest Schools sessions, at the end of term or at the end of the school year – whichever suits your particular setting.

The format is flexible too: you could use a form that you ask the children to fill in, you could ask them to draw, or you could run a group discussion.

Some of the questions you could ask....

1. I thought that Forest So	1. I thought that Forest School was				
Children put a x in the box they agree with or you could use smiley faces for children who can't read yet					
Amazing	,				
88	8	•	8		

2. Something I remember doing at Forest School
Children could write or draw



3. The best thing about Forest School was
Children could write or draw
1. The worst thing shout Forest School was
4. The worst thing about Forest School was Children could write or draw
Children Could write of draw
5. Something I learned at Forest School
Children could write or draw
6. During Forest School I got bottor at
6. During Forest School I got better at
Children could write or draw



7. Since going to	7. Since going to Forest School my [team work / focus / confidence / etc.; you could use					
the areas most in	the areas most important to your setting] has					
Children put a x in the box they agree with or you could use smiley faces for children who can't read yet						
Got a lot better Got a bit better Stayed same Got a bit worse Got a lot worse						
⊕ ⊕ • ⊗ ⊗ ⊗						

	nce to do Forest S on the box they agre	chool again I ee with or you could	use smiley faces	for children who	
Would definitely want	Would probably want	Wouldn't mind if I went or not	Wouldn't want to go	Definitely wouldn't want to	
to go	to go go				
88	8	•	8	88	

9. I found being able to choose what I wanted to do					
Children put a x in the box they agree with or you could use smiley faces for children who					
can't read yet					
Brilliant Good OK A bit confusing Really difficult					
88	Ŭ '				

10. Write anything else you want to say about Forest School – or draw a picture!	



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Not at all

UNIT 1: FOREST SCHOOL PROGRAMME DELIVERY HANDOUT 5: STAFF EVALUATION FORM

The following provides guidance on the type of evaluation you can carry out with the staff attending your Forest School sessions, or the client(s) who commissioned your services.

This type of evaluation is usually carried out at the end of a block of Forest Schools sessions, at the end of term or at the end of the school year – whichever suits your particular setting.

It is used to measure how well staff / clients think the sessions met the programme aims. In particular it should focus on changes in pupils' behaviour, learning, attitude, self-esteem, overall confidence, confidence in the outdoors, anything that has had an impact outside of Forest School and can help assess the benefits (or not) of Forest School.

1. How well did Forest School help promote personal, social and emotional development

OK

A little

Some of the questions you could ask....

in the children who attended?

Well

Brilliantly

Comments:

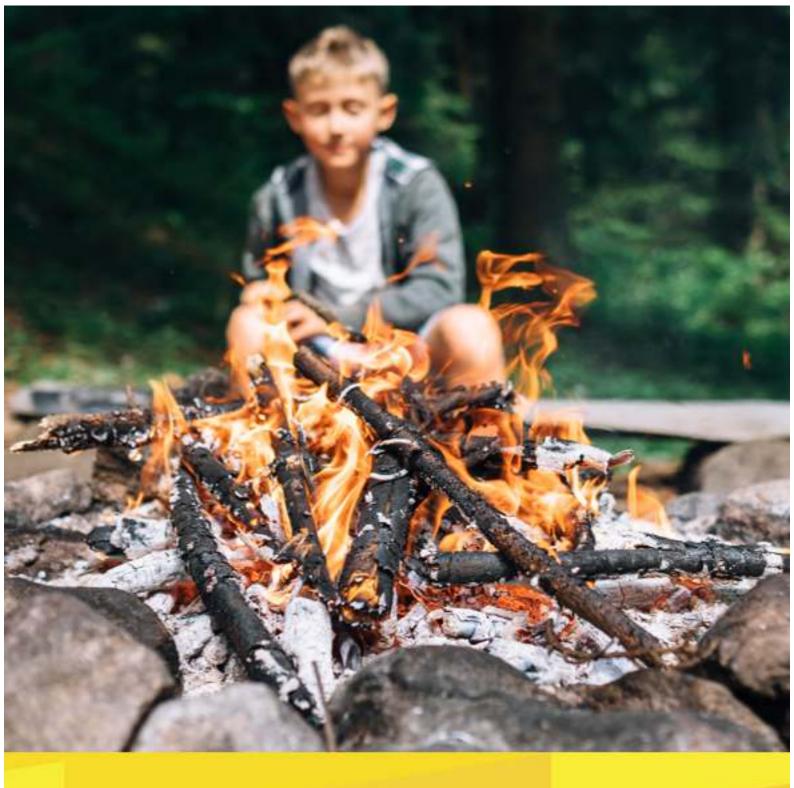
	orest School help b			
Brilliantly	Well	OK	A little	Not at all
Dimanciy	****		, there	. voc at an
Comments:				1



	learning style?	1		1
Brilliantly	Well	OK	A little	Not at all
mments:				
How well did I	Forest School help	develop communi	cation and listeni	ng skills? How
did it provide	opportunities for d	lifferent types of c	<mark>ommunication an</mark>	_
Brilliantly	Well	OK	A little	Not at all
mments:				
How well did I	Forest School supp		_	· ·
How well did F			_	
helping them to others?	take responsibilitie	es, assess risk, mot	ivate and regulate	e themselves a
How well did Find the helping them to others? Brilliantly mments:	Well	OK	A little	Not at all
How well did for the second se	take responsibilitie	OK Children become n	A little A ore aware and k	Not at all
How well did I helping them to others? Brilliantly omments:	Well Forest School help	OK Children become n	A little A ore aware and k	Not at all



	to the school	•	evelop learning witl	h different
Brilliantly	Well	ОК	A little	Not at all
Comments:				
8. Do you hav	e any other ob	servations, comm	<mark>ents or feedback or</mark>	n the programme as a
Comments:				



UNIT 2

FS PROGRAMME: LEARNING AND DEVELOPMENT





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UNIT 2: FOREST SCHOOL PROGRAMME LEARNING AND DEVELOPMENT HANDOUT 1: SUMMARY OF HUMAN DEVELOPMENT STAGES AND MILESTONES (0-16 YEARS OLD)

Birth to 12 months Infancy	 During this period, young children's physical development is very rapid and they gain increasing control of their muscles. They also develop skills in moving their hands, feet, limbs and head, quickly becoming mobile and able to handle and manipulate objects. They are learning from the moment of birth. Even before their first words they find out a lot about language by hearing people talking, and are especially interested when it involves themselves and their daily lives. Sensitive caregiving, which responds to children's growing understanding and emotional needs, helps to build secure attachments to special people such as parents, family members or carers. Regular and flexible, routines help young children to gain a sense of order in the world and to anticipate events. A wide variety of experience, which involves all the senses, encourages learning and an interest in the environment.
1-2 years old Toddler development	 As children become mobile new opportunities for exploration and exercise open up. A safe and interesting environment, with age-appropriate resources, helps children develop curiosity, coordination and physical abilities. Children start to learn the beginnings of self-control and how to relate to other people. In this period children can be encouraged to develop their social and mental skills by people to whom they have a positive attachment. Building on their communication skills, children begin to develop a sense of self and are more able to express their needs and feelings. Alongside non-verbal communication children learn a few simple words for everyday things and people. With encouragement and plenty of interaction with carers, children's communication skills grow and their vocabulary expands very rapidly during this period



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3-4 years old Toddler development

- Children's fine motor skills continue to develop and they enjoy making marks, using a variety of materials, looking at picture books and listening to stories, important steps in literacy.
- Self-help and independence soon emerge if adults support and encourage children in areas such as eating, dressing and toileting. Praise for new achievements helps to build their selfesteem. In this phase, children's language is developing rapidly and many are beginning to put sentences together.
- Joining in conversations with children is an important way for children to learn new things and to begin to think about past, present and future.
- Developing physical skills mean that children can now usually walk, climb and run, and join in active play with other children.
 This is an important time for learning about dangers and safe limits

4-5 years old Early Childhood

- An increased interest in joint play such as make-believe, construction and games helps children to learn the important social skills of sharing and cooperating.
- Children also learn more about helping adults in everyday activities and finding a balance between independence and complying with the wishes of others. Children still need the comfort and security of special people.
- Close, warm relationships with carers form the basis for much learning, such as encouraging children to make healthy choices in food and exercise.
- At this stage children are becoming more aware of their place in a community. Literacy and numeracy can develop rapidly with the support of a wide range of interesting materials and activities.
- Children's language is now much more complex, as many become adept at using longer sentences. Conversations with adults become a more important source of information, guidance and reassurance



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5-6 years old Early Childhood

- During this period children are now building a stronger sense of their own identity and their place in a wider world.
- Children are learning to recognise the importance of social rules and customs, to show understanding and tolerance of others, and to learn how to be more controlled in their own behaviour.
- Learning and playing in small groups helps to foster the development of social skills. Children now become better able to plan and undertake more challenging activities with a wider range of materials for making and doing.
- In this phase children learn effectively in shared activities with more able peers and adults. Literacy and problem solving, reasoning and numeracy skills continue to develop.
- Children's developing understanding of cause and effect is encouraged by the introduction of a wider variety of equipment, media and technologies.

6-12/13 years old Middle Childhood

Physical changes slow down until puberty. Eye-hand and small muscle coordination continue to develop. Physical activities become more vigorous as children run faster and jump higher with faster reaction times, which makes action games more popular. 6-7 year olds can take part in more complex skill based tasks e.g. using tools, as their small muscle coordination develops. Games where hand-eye coordination e.g. throwing, catching, and hitting targets become more refined. Mental capacity also improves with more logical and systematic thinking but abstract thought is underdeveloped. At this stage the ability to remember and master skills make progress e.g. learning a musical instrument.

12/13 -18 years old Adolescence

• As well as the physical changes the unique sense of self and personal identity develops. The desire to fit in with others can be a predominant factor. The individual may require support to develop solve problems independently. Negative responses towards authority figures can occur at the early stages of puberty but this can change as the young person is able to see other points of view and develop their capacity to compromise and examine their personal experiences. Body image perceptions can feel intense but can decrease towards the end of the phase.



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UNIT 2: FOREST SCHOOL PROGRAMME LEARNING AND DEVELOPMENT HANDOUT 2a: TAXONOMY OF PLAY TYPES

Source: Bob Hughes, 1996, from 'Making sense of Play' by Perry Else

COMMUNICATION PLAY

Play using words, nuances or gestures e.g. mime, jokes, play acting, teasing, singing, debate, poetry

CREATIVE PLAY

Play that allows a new response, the transformation of information, awareness of new connections, with an element of surprise e.g. enjoying creating using a range of materials and tools for their own sake

DEEP PLAY

Play that allows the child to encounter risky or life threatening experiences, to develop survival skills and conquer fear e.g. climbing trees to a out of reach heights, balancing on a beam etc.

DRAMATIC PLAY

Play that dramatizes events in which the child is not a direct participant e.g. presenting a TV show, a festival or party or other significant event

EXPLORATORY PLAY

Play to access factual information consisting of manipulating actions such as handling, throwing, banging or mouthing objects e.g. engaging with an object or area by movement, assessing its properties, content and latent possibilities such as stacking bricks, mixing mud and water

FANTASY PLAY

Play that rearranges the world in the child's way in a way that is unlikely to happen to the child in the immediate e.g. being a wizard, a pilot or the owner of an expensive car

IMAGINATIVE PLAY

Play where the conventional rules, which govern the physical world, don't apply e.g pretending to be a tree, ship or animal

LOCOMOTOR PLAY

Movement in any direction e.g. chasing, playing tag, hide and seek



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MASTERY PLAY

Control of the physical and affective elements of the environments e.g. digging holes, building shelters and fires, using tools

OBJECT PLAY

Play that uses infinite and interesting sequences of hand-eye movements e.g. examining and alternative uses of an object such as a paintbrush or cup

RECAPITULATIVE PLAY

Play that is a recap of human historical evolutionary events e.g rituals, fire making, den making, using weapons, caring for other species

ROLE-PLAY

Play exploring ways of being, although not normally of an intense personal, social, domestic or interpersonal nature e.g sweeping the floor, dialling with a phone, driving a car

ROUGH AND TUMBLE PLAY

Close- encounter play that is less to do with fighting and more to do with touching, tickling, testing strength and flexibility and the exhilaration of display e.g. playful fighting, wrestling and chasing where the children are unhurt and having fun

SOCIAL PLAY

Play where the rules and criteria for social connections and interactions are revealed, explored and adjusted e.g. social, interactive scenarios where the rules and protocols are to be followed i.e. games, conversations, making something

SOCIO-DRAMATIC PLAY

The enactment of real and potential experiences of an intense personal, social or domestic nature e.g. playing at house, going to the shops, being 'mums and dads', organizing a meal or having an argument

SYMBOLIC PLAY

Using symbols to represent as other 'real' objects. This play supports children's control, gradual exploration and increased understanding of the world without being out of depth e.g. a stick to represent a person, a stone as a pet dog

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UNIT 2: FOREST SCHOOL PROGRAMME LEARNING AND DEVELOPMENT HANDOUT 2b: 7 PRINCIPLES FOR CHILDREN AND NATURE - DAVID SOBEL (2008)

Principle 1: Adventure

This includes activities that include a physical challenge, risk taking, and kinesthetic components e.g. adventure-based games, balancing, jumping and other ways of moving through the natural world

Principle 2: Fantasy and Imagination

This includes activities that inspire creative imaginative stories, plays, puppet shows, and dreams. e.g. props to use for storytelling, dressing up costumes and accessories

Principle 3: Animal Allies

This includes spaces and activities that connect children to the animal kingdom e.g. activities such as building bird boxes, making bird feeders, observing animals in their habitats

Principle 4: Maps and Paths

This includes activities that include map making, following paths and trail blazing e.g. scavenger hunts, stepping stones, journeys, following trails etc.

Principle 5: Special Places

This includes activities that offer the opportunities for children to hide away e.g. hidden dens, sit spots

Principle 6: Small Worlds

This includes activities that center around miniature worlds e.g small world models and toys that encourage building and deconstructing worlds

Principle 7: Hunting and Gathering

This included activities that include hunting and gathering games, collecting treasures and climbing e.g. collecting pebbles/stones, sticks, treasure hunts

See "Childhood and Nature. Design Principles for Educators." by David T Sobel published by Stenhouse Publishers (2008)



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UNIT 2: FOREST SCHOOL PROGRAMME LEARNING AND DEVELOPMENT HANDOUT 2c: 6 Risky Play categories (Sandseter 2007)

Play with great heights

Climbing trees, jumping off trees, balancing on branches, slippery fallen trees

Play with high speed

Running, cycling, speeding downhill, rolling, sliding on mudslides

Play with harmful tools

Using knives, saws, billhooks, hammers and other 'dangerous' tools

Play near dangerous elements

Playing near fire, ponds, rivers, cliff edges

Rough-and-tumble play

Playing chase and catch, wrestling, sword fighting, snowball fights etc.

Play where the children can 'disappear' or get lost

Playing hide and seek, hiding in trees/shelters etc.

When children engage with risky play activities they experience a combination of fear and exhilaration - this is the 'emotional goal' of the risky play for them as they seek to feel exhilarated but keep the fear at bay. Finding a balance between the two emotions becomes important in order for children to discover the benefits of those activities. The child will be focused on the experiencing the enjoyment of the risk, while balancing on the edge of the fearful emotions. If a child experiences too much fear then the risk of injury or withdrawal from the activity becomes more likely.

See the article "Children's Expressions of Exhilaration and Fear in Risky Play" by Ellen Beate Hansen Sandseter published in Contemporary Issues in Early Childhood Volume 10 Number 2 2009 for full details of the study.



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UNIT 2: FOREST SCHOOL PROGRAMME LEARNING AND DEVELOPMENT HANDOUT 3: RECENT DEVELOPMENTS IN PLAY POLICY

The last Labour government had introduced a 12-year Play Strategy for England, but Children's Play has not been as prominent in the national debate since the Coalition Government abandoned that strategy in 2010.

There are however a number of developments around Play and Play Policy, both at the national and international level, which the links below cover.

UN Convention on The Rights of The Child	https://www.unicef.org/crc/files/Rights_overview.pdf
Children's Play Policy Forum	https://childrensplaypolicyforum.wordpress.com/
Play England Charter	http://www.playengland.net/wp- content/uploads/2015/09/charter-for-childrens-play.pdf
Children's Rights Alliance for England	http://www.crae.org.uk/media/78665/crae_civil_society_report_to_un_web.pdf
World Economic Forum Real Play Coalition	https://www.weforum.org/agenda/2018/01/to-play-is- to-learn/ https://www.realplaycoalition.com/about-us/



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UNIT 2: FOREST SCHOOL PROGRAMME LEARNING AND DEVELOPMENT HANDOUT 4: SUMMARY OF JEAN PIAGET'S THEORY OF SCHEMAS AND COGNITIVE DEVELOPMENT

Piaget believed that intelligence is not fixed but a process that evolves and changes as biological maturity occurs and as interaction with the environment happens. Therefore cognitive development is something that can be influenced and adapted.

One aspect of Piaget's theory focused on the building blocks of human behaviour, which he classified as schemas. These spontaneous actions are the responses that children use when engaging with the world and are unique to each child. Some children use a pattern of schemas, some use one distinctively and others are less obvious in their use. As children demonstrate their use of schemas we have the opportunity to support children to connect what drives them with the activities that they choose to participate in.

The schemas that Piaget observed cover a variety of interests and impulses.

Trajectory	
Vertical Trajectory	Horizontal Trajectory
 Jumping up and down Fascinated with running water Likes building high Enjoys carrying sticks Bouncing balls Climbing up and down Sliding down slides 	 Placing objects in a line or a row Enjoys pushing prams and trolleys Walking on lines Sweeping or mopping the floor Rides a bicycle in lines

Transporting

- Carrying bags containing objects
- Pushing prams/trolleys with objects in
- Carrying water in containers
- Carrying planks and bricks
- Being a 'driver' and taking friends on rides/trips



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Connection

- Glue, sew or fasten fabric in lines
- Nail pieces of wood together in construction
- Use string, rope, wool etc. to tie objects together
- Drawings and paintings sometimes show linked parts
- Tying things together
- Enjoying toys that link or connect

Rotation

- Enjoys using whisks
- Turning or spinning objects
- Spinning on chairs
- Watches washing machines
- Fascinated with wheels, keys, cogs, taps
- Constructs with objects with rotating parts in wood etc.
- Loves cars, bikes, trucks and objects with wheels
- Rides a bicycle round and round in circles

Circularity

- Circles appear in paintings, drawings as heads, bodies, eyes etc.
- Circles to represent animals, flowers, wheels, the sun and other objects

Enveloping

- Completely cover objects, space or themselves
- Like to dress up using hats, scarves and other items
- Wraps dolls or teddies in blankets
- Wraps things in paper, encloses them in pots and boxes with covers and lids
- Wraps themselves in a blanket, or creep under a rug
- Glue layers of paper or fabric into a collage
- Fill bags with collections of things



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Enclosure

- Builds enclosures with blocks, legos, bricks, crates and maybe name them e.g. pond, boats, beds
- Leaves the enclosure empty or carefully fills it
- Puts an enclosing lines around the paintings or drawings

Filling

- Filling containers with a variety of materials e.g. sand in buckets, holes in the ground
- Putting water in containers
- Placing objects in bags

Boundary

 Moving, crawling through boundaries e.g. pushing a train through a tunnel, water through a hose, crawling through a tunnel

Orientation

- Turning things upside down to look at them
- Examining underneath objects
- Hanging upside down to observe others
- Bending to look at the world from different directions including between their own legs

See "Again! Again! Understanding schemas in young children" by Stella Louis, Clare Beswick, Liz Magraw, Lisa Hayes published by A&C Black (2008)

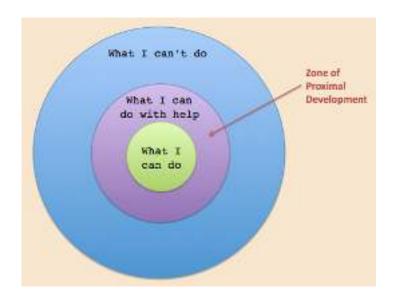


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UNIT 2: FOREST SCHOOL PROGRAMME LEARNING AND DEVELOPMENT HANDOUT 5: VYGOTSKY'S SOCIAL DEVELOPMENT THEORY

The Zone of Proximal development or ZPD is what Vygotsky defined as the space or difference between what a learner can do without help and what they can do with guidance and support from an educator or skilled partner.

The term 'proximal' refers to the skills that the learner is 'close' to mastering and becoming able to carry out independently.



The ZPD becomes the area where instruction and 'scaffolding' (Wood, Bruner and Ross 1976) becomes beneficial. The scaffolding can take the form of focused questioning, positive interactions and the creation of small achievable tasks to help the learner feel success and supported.

As the task or activity is repeated over time the support provided is reduced as the learner becomes more compotent and closer to becoming an independent problem solver.

Wood et al (1976) recommended particular strategies to support the scaffolding process.

- Gain and maintain the learner's interest
- Make the task simple
- Emphasise certain aspects to help with the solutions
- Control the learner's level of frustration
- Demonstrate and model the task

How do you think this theory relates to the skills taught through a Forest school experience?



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UNIT 2: FOREST SCHOOL PROGRAMME LEARNING AND DEVELOPMENT HANDOUT 6: HOWARD GARDNER'S THEORY OF MULTIPLE INTELLIGENCES

Dr Howard Gardner (Harvard, 1983)

People Smarts are normally good at...

- Caring about others
- Sharing with others
- Working with others
- Making/having lots of friends
- Communicating
- Playing games with others
- Explaining a point of view

Nature Smarts are normally good at...

- Investigating the natural world
- Being at ease in the natural world
- Understanding natural phenomena
- Fascinated by nature, plants and creatures
- Gardening/growing
- Looking after animals
- Understanding environmental issues
- Being outdoors

Self Smarts are normally good at...

- Working independently
- Being alone
- Imagining/telling stories
- Needs quiet spaces and alone time
- Self-motivation
- Planning and organising
- Thinking

Word Smarts are normally good at...

- Learning by listening
- Reading/understanding word sounds
- Verbalizing feelings and emotions
- Discussions
- Word games
- Remembering words from songs/lyrics / Remembering trivia



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Maths/Logic Smarts are normally good at...

- Counting
- Puzzles
- Problem solving
- Using clear reasoning
- Finding abstract patterns
- Computer games

Body Smarts are normally good at...

- Lifting and carrying
- Communicating through gestures
- Learning by touch and feel
- Building structures
- Role-playing
- Dancing
- Sports and physical activities
- Shaping and sculpting materials

Music Smarts are normally good at...

- Singing
- Remembering songs and rhymes
- Enjoying playing an instrument
- Listening to music
- Noticing non-verbal sounds in the environment
- Learning a rhythm
- Tapping and clapping

Picture Smarts are normally good at...

- Learning by watching and looking
- Attention to detail
- Making things look right
- Being creative
- Noticing colours and form
- Choosing their own clothes to wear or dress up in

What intelligences do you see in your group of children?

How could we plan a Forest School session to cater for children displaying these intelligences?

T#E#IVE

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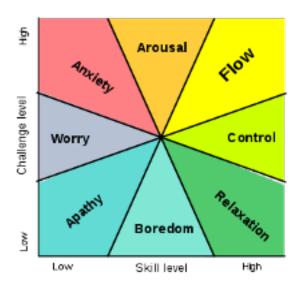
UNIT 2: FOREST SCHOOL PROGRAMME LEARNING AND DEVELOPMENT HANDOUT 7: MIHALY CSIKZENTMIHALYI'S FLOW THEORY

Csikzentmihalyi's theory of the flow state of mind seeks to explain how we can immerse ourselves in a state of complete happiness when participating in a variety of activities. Those activities extend across all human life, including how we work, play and relate to others. Csikszentmihalyi's theory shows that if we understand how we can tap into this concept of flow, how we engage with the world can become more enriching, feel more harmonious and a state of inner happiness can be established.

According to the studies completed by Csikszentmihalyi, when we immerse ourselves in a particular activity we can experience true enjoyment when the following components occur:

- The task we are trying to complete feels achievable.
- We are able to concentrate on the task
- The task has clear goals
- Immediate feedback is provided after the task is complete
- We can immerse ourselves so completely and effortlessly in the task that we become removed from external worry and frustrations
- We are able to control our actions
- Once the task is complete our sense of self is strengthened

In essence, it is a balance between the level of challenge involved in an activity and the skill required to complete it.



See "Flow. The Classic Work on How to achieve happiness" by Mihalyi Csikszentmihalyhi published by Random House (2002)



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UNIT 2: FOREST SCHOOL PROGRAMME LEARNING AND DEVELOPMENT HANDOUT 8: MASLOW'S HIERARCHY OF NEEDS

Maslow's theory focuses on how we understand our motivations and how they interrelate within a hierarchy. Maslow stated that we have 5 motivational needs, which are connected and are in relationship with each other (see the image below).



The first stages of the hierarchy are what are known as the basic needs (physiological, safety and security, love and belonging, self-esteem) and our motivation is stimulated when those needs are not met according to their position in the hierarchy. In addition, the longer we go without one element the stronger the desire becomes e.g. the more we go without eating the hungrier we become. In order to progress we have to satisfy our lower level needs before moving onto the higher levels. If we fulfill the needs at each level, we become more able to reach the growth level or self-actualization. Although, our self-actualization can take us in different directions we all experience it through peak experiences and the emotions of euphoria once they are experienced.

Maslow stated that there are particular behaviours that lead to self-actualization and help us satisfy our basic needs as we progress through the hierarchy. These behaviours are:

- Experiencing life like a child with full absorption and concentration
- Trying new things rather than sticking to the same paths
- Listening to your own feelings when evaluating experiences instead of the traditional voices of authority
- Avoiding pretense and being honest
- Being prepared to be unpopular
- Taking responsibility and working hard
- Trying to identify personal defenses and have the courage to give them up



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UNIT 2: FOREST SCHOOL PROGRAMME LEARNING AND DEVELOPMENT HANDOUT 9: HOLISTIC LEARNING AND EDUCATION PRINCIPLES

The philosophy of holistic education emphasises the education of the whole learner and encourages growth and a fulfillment of potential in every aspect of their being. In particular it highlights the social, physical, intellectual, communication, emotional, spiritual aspects of the individual.

Historically, early origins of this philosophy can be found in schools of thought created by Rudolf Steiner, Maria Montessori and others, who have sought to establish alternative educational provisions outside of traditional teaching methods.

In essence holistic education specifies that educational experiences shouldn't be limited to those driven by knowledge, but by creating moments when we can develop our ability to solve problems and develop as learners by using our whole selves. Holistic learning seeks to support learners to develop skills where creativity, imagination, originality, exploration, risk-taking and other skills are used to support personal development.

There are 3 elements at the core of the philosophy, which are:

- 1. Learners are considered as a whole person; a combination of mind, body, emotions/soul and spirit
- 2. Interconnectedness is valued learners are encouraged to see the whole and not just a part. Integrated learning is valued where the lines between subject areas and skills/knowledge are blurred.
- 3. A recognition and value of the variety of different viewpoints of the world a balance between Intuition and logic, creativity and critical thinking and how the world is perceived by different individuals in unique ways

In the US a leader of the holistic education movement Ron Miller adds four other essential characteristics of holistic education experiences.

- 1. Nurturing the whole development of the person is important. It's not just about academic preparation and testing but about the growth of the whole person.
- Educational experiences are built on equal relationships between educators and learners. Relationships and cooperation become the centre of a creating meaningful learning experiences.
- 3. Engagement with the real world and nurturing a learner's curiosity of their real world is essential.
- Enabling students to examine and define their values within society where they can
 evaluate their own viewpoint and consider their own belief systems within their
 world



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Teaching Methods

Holistic education practices emphasise two methodologies as teaching methods - **transaction** and **transformation**

Teaching as transaction

Knowledge is not passively received but constructed by connecting previous knowledge and experiences with the new information being learnt. The role of the teacher becomes one to assist the learner by creating experiences that help them connect the previous learning with the skills and knowledge being learnt.

Teaching as transformation

Conditions are created to transform the learner holistically in order to create nurturing experiences for them where they are able to understand and care for the connections between themself, others and the environment as learning occurs.

"Holistic education is a philosophy of education based on the premise that each person find identity, meaning, and purpose in life through connections to the community, to the natural world, and to humanitarian values such as compassion and peace. Holistic education aims to call forth from people an intrinsic reverence for life and a passionate love of learning."

Ron Miller

See "Holistic Learning Theory and Holistic Education" by Andrew P. Johnson, Ph.D. Minnesota State University, Mankato (https://www.academia.edu/19752569/Holistic_Learning_Theory_and_Holistic_Education)



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UNIT 2: FOREST SCHOOL PROGRAMME LEARNING AND DEVELOPMENT HANDOUT 10: WHAT IS WELLBEING?

Research has shown that a significant minority of children in the UK have low levels of well-being. This will have severe impact on their childhood and life chances, as well as on the families and communities around them, and the agencies that support them. Evidence also shows that external factors play a major role in determining children's life satisfaction and life chances.

The six priorities for children's well-being are:

- 1. The conditions to learn and develop
- 2. A positive view of themselves and an identity that is respected
- 3. Have enough of what matters
- 4. Positive relationships with family and friends
- 5. A safe and suitable home environment and local area
- 6. Opportunity to take part in positive activities to thrive

The Forest School approach offers important opportunities to support children's wellbeing in 4 out of the 6 areas.

The Wheel of Wellbeing

The Wheel of Wellbeing is a visual framework made up of six universal themes that underpin mental and physical health & wellbeing:

- 1. Body
- 2. Mind
- 3. Spirit
- 4. People
- 5. Place
- 6. Planet

Based on the principles of positive psychology, it is a simple approach to promoting positive mental health and wellbeing. The Wheel of Wellbeing was initially developed by the Mental Health Promotion Team at South London and Maudsley NHS Foundation Trust (SLaM), who have used it in a range of contexts.

The Scottish example - The Children and Young People (Scotland) Act 2014 introduced a common understanding of what wellbeing means in the context of young people and education, which is described through eight indicators.



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The wellbeing indicators can help make it easier for Forest School practitioners to be consistent in how they approach the quality of a child or young person's Forest School experience at a particular point in time.

FURTHER READING

Promoting positive wellbeing for children, The Children Society

https://www.childrenssociety.org.uk/sites/default/files/tcs/promoting positive well-being for children final.pdf

Prioritising wellbeing in schools, Young Minds

https://youngminds.org.uk/media/1428/wise-up-prioritising-wellbeing-in-schools.pdf



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UNIT 2: FOREST SCHOOL PROGRAMME LEARNING AND DEVELOPMENT HANDOUT 11: THE BENEFITS OF FOREST SCHOOL TO THE WELLBEING OF CHILDREN

There is a growing body of research that illustrates the importance of environmental experience and contact with nature in childhood to promote children's physical and mental health and wellbeing. Forest School is proven to play an important role in this regard.

The benefits of being outdoors: Improved Mental Health, Wellbeing and Self Confidence

Many studies show a link between outdoor activities and significant improvements in psychological and emotional wellbeing in children.

The freedom to play in the fresh air, running free and just "be a kid", away from the confines of four walls, is important to them. When playing outdoors, there are fewer rules.

Outdoor play allows children's bodies to produce vitamin D from its best natural source, the sunlight. Vitamin D enhances mood by helping to release serotonin in the brain. Children need healthy levels of serotonin for good mental health and development.

Playing outdoors in a natural environment is also thought to help relieve stress by reducing levels of cortisol, a "stress hormone", in the brain. Children are frequently exposed to stressful environments such as busy, noisy urban areas, flashing screens and pressured classrooms, which can lead to anxiety and depression. Playing outdoors offers some escape.

With improved wellbeing comes self-confidence. From having the freedom, time and space to learn, grow and develop independence. When playing outdoors, children discover nature and how the world works for themselves. They'll naturally play with peers and learn how to interact with others. They may fall, have bumps and scrapes, but they'll learn to pick themselves up and learn from their own mistakes. These are all good life skills that will see them well into adulthood.

The benefits of being outdoors: Physical Development and Battling Obesity

Childhood obesity is one of the most serious global public health challenges for the 21st century. Obese children have an increased risk of developing health problems. They're also more likely to become obese adults. The UK has the highest level of childhood obesity in Western Europe.



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Regular exercise is an essential part of keeping fit, maintaining a healthy weight and combatting obesity. Getting children outdoors and moving can help solve the problem of obesity.



MENTAL WELLBEING Building on the research on physical health benefits, researchers subsequently reviewed studies about nature and mental wellbeing, finding: ► The estimated total cost of mental - The immediate outcomes of The immediate outcomes of contact with nearby nature include Disorder (ADHD) is a significant health in England is £77 billion enjoyment, relaxation and public health problem that effects 5-10% of school children in the lowered stress levels. The longer-UK. It is characterised by ► 8.3% of children and young term, indirect impacts also include overective and impulsive people aged 5-15 years in increased levels of satisfaction behaviour and difficulty in paying Scotland are reported to have with home and work life, and a mental disorder. This figure with life in general. attention, causing disruption to includes emotional disorders. those around and reducing the ► Children with stressful life events are morn likely to develop mental health problems. There is evidence ➤ Outdoor activities in nature appear conduct disorders and hyperkinetic disorders. that children who experience stressful events in their lives are to improve symptoms of AOHD in children by 30% compared with urban outdoor activities There is a steady increase in the use of medication in childhood mental illness. More less stressed and have a higher global self-worth the more they and threefold compared with the anti-depressants, following a Indoor environment. All children sharp rise over recent years. with ADHD may benefit from more time in contact with nature, greener routes to school and more natural views from their windows.



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The Benefits of Forest School to the Emotional Well-being of Children

The natural environment offers children opportunities to establish the deep thought processes that are needed in order to assimilate into their lives, the causes and consequences of change, new situations or distressing occurrences. These processes need time, space, peace and freedom, which are less available in an indoor environment.

Creating a forest school environment and ethos for children in early years settings helps children to develop the strength and resilience needed to cope with emotional challenges and difficulties. Children taking part in forest school sessions quickly show evidence of a greater emotional maturity.

Great empathy for the living environment may emerge, with much tree hugging and care taken not to disturb animals and growing plants. The children frequently show concern for each other and take responsibility for ensuring each other's safety, they may remind each other of areas of risk or spontaneously use familiar safety games to ensure everyone remains within hearing. Stronger bonds often emerge between children, resulting in greater support for each other, both at forest school and outside.

The Benefits of Forest School to the Physical Well-being of Children

A forest school environment gives children the space and freedom that may not otherwise be available in their lives. Children are growing all the time and need space to experiment with their changing size and strength. Some children's lives have little space to move, houses are smaller, parents are more cautious, classrooms are too full and expectations within them are restrictive, but developing strong bones and muscles requires space for physical challenges and extended movement opportunities.

The natural environment also promotes the development of children's learning through their senses and can help to protect those senses. Research shows evidence that spending time engaged in activities in a natural environment helps to prevent the deterioration of children's eyesight.

Many behavioural difficulties also have their roots in children's struggles with physical and emotional issues. While the ethos and expectations of forest school sessions may help children to control the consequences, the natural environment offered by forest school can also go some way to enabling children to cope with the causes of their behavioural difficulties.



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Children have preferred learning styles. Forest school activities provide opportunities for visual, auditory and kinaesthetic learning within each activity. Forest school activities are flexible, enabling all children to achieve with a degree of challenge, building confidence and self-esteem and encouraging the perseverance that will help to build resilience.

Forest school activities encourage children to form bonds with children and adults as they work together to achieve. Children learn to take responsibility for themselves and for others as well as developing their sense of self preservation.

Just as the natural environment can be calming and reassuring to children so can it also for the adults involved. We should not underestimate the impact of this on children's behaviour and expectations, children easily pick up on adult's emotional state – calm adults can equal calm children.

At forest school children have an environment that is rich, varied and ever changing. Less restrictive than a classroom it enables confident exploration in a safe but challenging environment. Forest school enables children to develop their awareness of safety and to take control of their environment. Forest school is full of opportunities for exploration, which is at the heart of learning. Children discover connections and find new and innovative ways of doing things and achieving, supported by adults to think critically. Forest school and forest school activities support the holistic nature of children's exploration and learning.

FURTHER READING

Forest Schools & Mental Wellbeing, Anna Roberts
Canterbury Christchurch University, 2017
http://create.canterbury.ac.uk/16363/1/Anna Roberts MRP 2017.pdf

A marvellous opportunity for children to learn, Liz O'Brien & Richard Murray Forestry Commission, 2006

https://www.forestresearch.gov.uk/research/forest-schools-impact-on-young-children-in-england-and-wales/

Investigating the effectiveness of Forest School sessions on children's physical activity levels Clare Austin, Dr Zoe Knowles and Jo Sayers, 2013 https://www.merseyforest.org.uk/.../Austin,+C.,+Knowles,+Z.+and+Sayers,+J.+Forest+...



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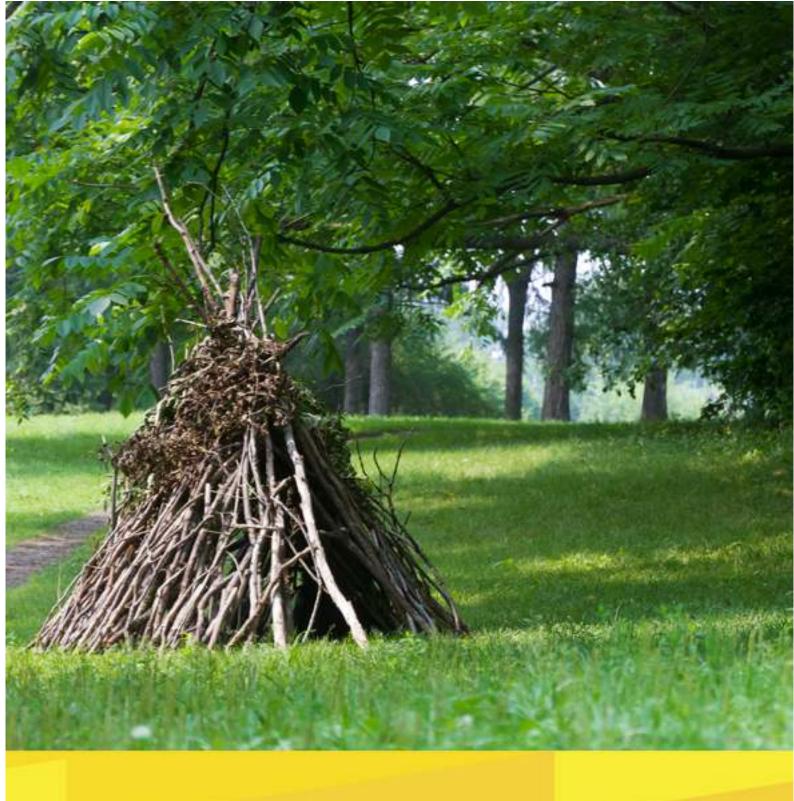
Forest and nature school in Canada: A head, heart, hands approach to outdoor learning H. Andrachuk. et al., 2014

http://childnature.ca/wp-content/uploads/2017/10/FSC-Guide-1.pdf

Student outcomes and natural schooling, Karen Malone & Sue Waite, 2016 https://www.plymouth.ac.uk/uploads/production/document/path/6/6811/Student outcomes and natural schooling pathways to impact 2016.pdf

Every child outdoors, RSPB, 2010 http://ww2.rspb.org.uk/Images/everychildoutdoors tcm9-259689.pdf

Natural childhood, Stephen Moss
National Trust, 2012
https://www.nationaltrust.org.uk/documents/read-our-natural-childhood-report.pdf



UNIT 3

FS PROGRAMME: PLANNING AND PREPARATION





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UNIT 3: FOREST SCHOOL PROGRAMME PLANNING AND PREPARATION HANDOUT 1: HISTORY OF FOREST SCHOOL IN THE UK

1800s

Romantic movement responded to the industrial movement of the 1700s. Creative freedom, childhood innocence and highlighting the power of finding connection in the natural world vs rationalism, capitalism and enlightenment.

German child centred educators emerged – Pestalozzi, Froebel and Steiner created educational philosophies where the natural world was used as a learning environment.

Early 1900s

Scouting movement created by Baden-Powell began

Margaret McMillan (1860-1931) created the 'Open air movement' - imaginative play approach within open air nursery school environments in Bow and Deptford in order to change and improve children's health in the 1920s

Maria Montessori (1870-1952) emphasis on children appreciating beauty and order within nature as a living educational force.

Susan Isaacs (1885-1952) influenced by Piaget to facilitate real-life learning journeys with outdoor play. She highlighted the importance of close observation and documentation, sensitivity of response when interactive with children, reflecting on practice to support next steps and scaffolding where necessary.

Mid 1900s

Woodcraft folk formed after WW1 'the skill of living in the open air, close to nature' – all members have an equal say in decision making and it was that may have influenced child-centred practice within the progressive movement.

Outward Bound Trust opened its first centre in Aberdovey in 1941 - problem-solving, experiential learning within wild landscapes. Forest school not emphasized but became common practice within educational settings.



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Scandinavian influences in the UK

In 1957 the Swedish Friluftsliv 'free air life' culture influenced Skogsmulle movement for early years. Meanwhile the Metsamoon movement in Finland was established – practice in both countries was based on characters, songs and stories and spiritual connections with the outdoors. In Denmark the åbørnspædagogik movement where Forest school became integral to the early years movement – local woodlands as a learning environment to help children become independent and socialised within their communities.

Post WWII

Rise of child- centred practice – Plowden report (1967) recommended that the UK primary education system to emphasise strengthening children's intrinsic interests in leading their own learning, play based experiences, learning by discovery and using observation to evaluate.

1980s

The Plowden report's recommendations were abandoned in support traditional pedagogy however the play work movement continued to advocate free, spontaneous play through adventure playgrounds – experimentation, building and using risky play

1990s

A group from Bridgewater college went to Denmark to observe the early years settings and created their own Forest school on their return to the UK and created a training curriculum in 1995.

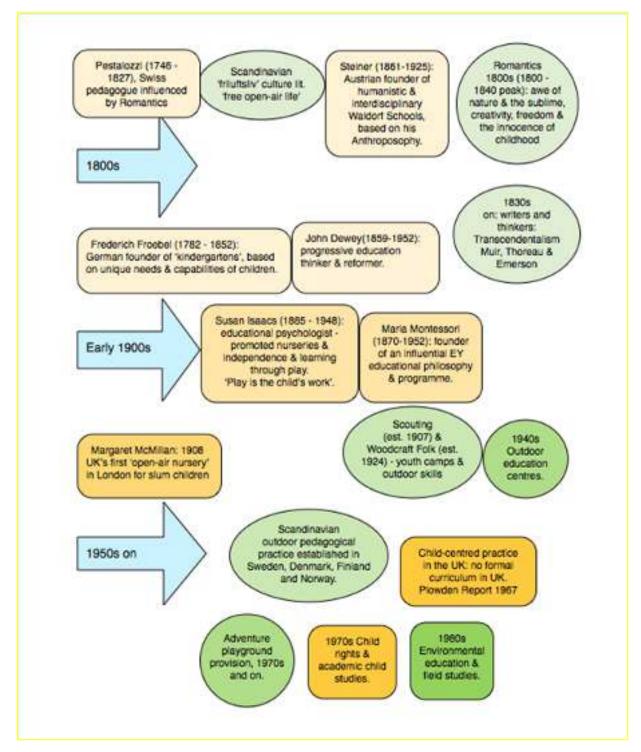
2000s

Creation of various Forest school networks across the UK and within local authorities with support from the Forestry Commission and other agencies supporting Forest school. These evolved into a variety of bodies e.g. Forest School Education Initiative.

2012

Forest School Association created to train practitioners, support and monitor practice as a governing professional body







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UNIT 3: FOREST SCHOOL PROGRAMME PLANNING AND PREPARATION HANDOUT 2: FSA HEALTH & SAFETY GUIDANCE

Introduction to health and safety law and duties of care Contents

- • What does the Health and Safety at Work Act 1974 say?
- · Other duties of care and national frameworks
- Suggestions for applying health and safety law to Forest School contexts
- Links to further reading on Health and Safety Executive website

Introduction

Health and safety law is often used as an excuse to stop children taking part in exciting activities, but well-managed risk is good for them. It engages their imagination, helps them learn and even teaches them to manage risks for themselves in the future. They won't understand about risk if they're wrapped in cotton wool. Risk itself won't damage children, but ill-managed and overprotective actions could!

(Health and Safety Executive Website -Myth of the Month)

Health and safety is paramount to many aspects of Forest School. Having a strong understanding of Health and safety law and putting appropriate paperwork in place allows the Forest School practitioner to facilitate beneficial risk opportunities for the learners, that are appropriate to their needs and experience, as well as supporting the learners to develop their own risk awareness and decision making.

For definitive guidance on health and safety in the UK please visit the Health and Safety Executive website.

What does the Health and Safety at Work Act 1974 say?

The Health and Safety at Work Act outlines the general legal duties an employer has to their employees and members of the public to ensure their health, safety and welfare as far as reasonably practicable. It also outlines the duties employees have to the employer and each other.

Employers' duties include

- Deciding what could cause harm in the workplace and the precautions to stop it. This is part of risk assessment.
- Explaining, in a way employees can understand, how risks will be controlled and tell them who is responsible for this.



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- Consulting and working with employees and health and safety representatives in protecting everyone from harm in the workplace.
- Give employees the health and safety training they need to do their job, free of charge.
- Provide employees with any equipment and protective clothing (PPE) they need, free
 of charge, and ensure it is properly looked after.
- Provide toilets, washing facilities and drinking water.
- Provide adequate first-aid facilities.
- Report injuries, diseases and dangerous incidents at work to HSE.
- Have appropriate insurance that covers all staff and members of public for tasks undertaken. Display a hard copy or electronic copy of the current insurance certificate where it can be easily read.
- Work with any other employers or contractors sharing the workplace or providing employees (such as agency workers), so that everyone's health and safety is protected.

At Forest School the 'employers' could be the Local Educational Authority in county, controlled and special agreement schools (England), or the Local Authority in Scotland. The governing body is the employer in city technology colleges, voluntary-aided, non-maintained and grant-maintained schools (England). The owner, governors or trustees are the employers in independent schools, businesses or not-for profit organisations (England and Scotland). Self-employed individuals (sole traders) are also considered 'employers' within the law.

Employees' duties include:

- Following the training they have received when using any work items the employer has given them.
- Take reasonable care of their own and other people's health and safety.
- Co-operating with the employer on health and safety.
- Reporting to someone (employer, supervisor, or health and safety representative) if they think the work or inadequate precautions are putting anyone's health and safety at serious risk.

The Health and Safety at Work Act was originally written to support industry workplaces, however it is still applicable to all workplaces, including Forest School.

It is important to remember that these duties are to be met 'as far as reasonably practicable'. Much of the debate around health and safety issues is about this 'reasonability' – which is subjective to each individual. What may be reasonable to one person may be unreasonable to another. Therefore before addressing these duties it is useful to reflect on our individual (and staff team) views on reasonability.



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Other duties of care and national frameworks

In addition to Health and Safety Law, Teachers and other practitioners in charge of children have a common law duty of care to act as any 'reasonable parent' would do in similar circumstances.

The Outdoor Education Advisors' Panel (www.oeap.info) issues national guidance about making offsite outdoor learning visits – www.oeapng.info. (England). Scotland's framework for safe practice in off site educational visits is called 'Going out there'.

If you are a Forest School practitioner who is not employed by a school but is working with them, it is still advisable to make yourself familiar with the procedures and guidance documents for schools so that you are better able to support your client groups. There are also certain things that schools will have to check of providers of educational experiences – such as policies and procedures, insurance, risk assessment etc.

Suggestions for applying health and safety law to Forest School contexts

As every Forest School programme is unique and there is great diversity between them, it is important that Forest School Leaders have a working understanding of Health and Safety Law and how they can apply it appropriately to their own context.

Using the legal duties for employers (listed above) as a framework we can consider the different areas covered and how it may be appropriate to apply them:

Aspect of Health & Safety	What this might look like within a Forest School context.
Risk Management	 Forest School leader actively shares their value judgement about risk and reasoning with other stakeholders. Risk assessment and risk benefit processes are in place and implemented. COSHH (Control of Substances Hazardous to Health) assessments undertaken & measures in place if needed. Risk management policy and procedures written within the Forest School handbook.
Effective Communication	 Appropriate communication with learners about health and safety issues & methods in place to help learners develop their own awareness and judgements. Ensuring learners know what to do if they encounter an unacceptable risk (who to tell, what to do etc) or when an emergency signal is made.



	 Communication of risk management systems and findings with other staff, volunteers, partner organisations, visitors etc. Awareness of which member of staff is responsible for overseeing health and safety in your organisation & ensuring they are aware of Forest School. Awareness of other groups/users of the Forest School site/location and appropriate communication undertaken to ensure they are aware of Forest School. Communication strategy – key stakeholders identified and systems in place for effective communication.
Appropriate training & supervision	 Forest School leader appropriately trained and qualified (Level 3 Forest School practitioner) Assistants appropriately trained, either through accredited training (Level 2 Forest School Assistant) or by the Forest School leader themselves. Clear & appropriate processes in place for higher risk activities (such as tree climbing, wild food foraging, using tools or fire etc). These processes are shared with learners so that they understand the protocols. Appropriate adult to learner ratios based on the risk management process.
Providing & maintaining Personal Protective Equipment	 Understanding that the decision to wear PPE is the last step within the risk assessment process and should be made after all other reasonable control actions have been implemented. Ensuring all participants (learners and adults) have appropriate outdoor clothing and footwear for the season, terrain and weather conditions and providing this if required. Providing any other additional PPE item required for specific tasks being undertaken (e.g. protective gloves for handling rough or thorny material, high visibility clothing for walking alongside roads, safety boots if carry heavy items or using edged tools near feet, hard hats if harvesting poles or pulling down hanging dead wood etc). Ensuring any PPE items used meet the appropriate specifications for the task, are in good condition and size appropriate for the user. Systems in place for storing, cleaning, checking and maintaining any PPE items and records kept.
Adequate welfare facilities	 Ensuring access to drinking water at all times. Ensuring access to adequate hand hygiene facilities.



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	 Ensuring appropriate toilet facilities are available or have appropriate toileting systems in place for more remote locations.
Appropriate first aid provision	 Receiving outdoor first aid training that is appropriate for the groups worked with, planned activities and site's remoteness. Identifying a first aider who accompanies the group at all times. Emergency equipment (including first aid kit) carried within a specific bag/box. Equipment carried is based on the site's remoteness, group and activities being undertaken. First aid and emergency procedures in place and known by all staff/helpers. Site specific information carried in emergency bag/box. Means of communication carried at all times (and all staff/helpers know its location).
Reporting systems	 Awareness of who to report incidents to within your workplace, and what information must be recorded and how. Awareness of what must be reported to HSE according to RIDDOR (Reporting of Incidents Diseases and Dangerous Occurrences) and their guidance for schools. Accident book/forms carried and systems in place for confidentiality. System in place for collecting details of 'near misses' Reflective processes within risk management systems to evaluate incidents/near misses and use this to inform future practices.
Insurance	 Ensuring appropriate insurances are in place for the site and the Forest School programme. This may involve sharing insurance documentation between different organisations. Providing copies of insurance documents to show partners/stakeholders. Creating a contractual agreement between the landowner/manager and the Forest School programme regarding roles, responsibilities and liability.

Ultimately one of the roles of a Forest School practitioner (Level 3) is to ensure their practice operates within all legal requirements, including the Health and Safety at Work Act. The topics above should inform the contents of practitioner's heath and safety policy and procedures (within their Forest School handbook).

A good understanding of health & safety and risk is what enables us to do what we do within our Forest School programmes. Careful practices that are reasonable and



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proportionate enable the learners we work with to experience risks and challenges that expand their experiences without putting their health and safety under unacceptable levels of risk.

Links to further reading on Health and Safety Executive website:

- · General Health and Safety Guidance www.hse.gov.uk
- · Risk Management www.hse.gov.uk/risk/index
- · COSHH www.hse.gov.uk/coshh/index
- · PPE www.hse.gov.uk/toolbox/ppe
- · Outdoor Thermal Comfort www.hse.gov.uk/temperature/outdoor
- · Manual Handling www.hse.gov.uk/toolbox/manual
- · Working at Height www.hse.gov.uk/toolbox/height
- · Welfare requirements www.hse.gov.uk/pubns/indg293.pdf
- · RIDDOR www.hse.gov.uk/riddor/



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UNIT 3: FOREST SCHOOL PROGRAMME PLANNING AND PREPARATION HANDOUT 3: ENVIRONMENTAL IMPACT ASSESSMENT

ENVIRONMENTAL IMPACT ASSESSMENT OF A FOREST SCHOOL SITE

Description of Forest School Site								
Name of wood/site	Location	OS Grid reference						
O /:	-:!-\							
Owner (include full contact deta	alis)							
Other identified stakeholders								
General Description: Landscape	context/topography							
(geographical location and feati	ures e.g. alongside river, steep sl	lopes etc.)						
	·							



Woodland [Description	
	Trees	
Elora	Plants	
	Fungi	
	Mosses	
Fauna	Birds	
	Mammals	
	Insects	



Abiotic elements	
Water	
Soil	
Bedrock/	
surface rock	
Auchanalagical considers	
Archaeological considera (if present)	itions
(in processor)	
Management history of	site
(e.g. when was the wood	established, previous uses etc.)
Long term vision	



Activity	Ground layer	Field Layer	Shrub Layer	Canopy Layer	Other



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UNIT 3 FOREST SCHOOL PROGRAMME: PLANNING AND PREPARATION HANDOUT 4: 3-YEAR SUSTAINABLE WOODLAND MANAGEMENT PLAN

NAME OF WOODLAND:

AIMS:

FACTOR	LOCATION OR MAP REFERENCE	CURRENT SITUATION	TARGET SITUATION	PREVENTATIVE MEASURES	MONITORING	METHOD OF MANAGEMENT	TIMESCALE
e.g. Pathways	Main path from entrance north towards south. Smaller tracks around the site.	Main established but become muddy during wet weather	Improved pathways and easier access around site	FS Groups to use alternative paths during winter	Review each term with support from the children	Children to help identify which paths to improve and which to use. Children assist with laying bark on paths.	Year 1 - Create bark paths Year 2 - Maintain paths Year 3 - Maintain and extend where necessary



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UNIT 3: FOREST SCHOOL PROGRAMME PLANNING AND PREPARATION HANDOUT 5: FS HANDBOOK CONTENTS CHECKLIST

At a minimum, your Forest School Handbook should include the following documents (<u>with</u> <u>reference to appropriate legislation</u>).

You can also add more documents, as you grow in confidence with your practice, but as part of the Level 3 FS award, you will be assessed on the following.

1	Cover with date of publication							
2	Table of contents							
3	Declaration of review date							
4	Declaration stating the Handbook has been read by all supporting Forest School adults with a regular role in the setting							
5	Vision statement reflecting the Forest School Ethos and Principles (to include the pedagogy of Forest School and the role of play and choice)							
6	Behaviour Management Policy							
7	Environmental Policy 1. Ecological Impact 2. Landowner's Agreement 3. Woodland Management							
8	Equality and Diversity Policy 1. Including Prevent strategy where appropriate							



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Health & Safety Policy

- 1. Accident & Emergency
- 2. Cooking and Food Hygiene
- 3. Control of Substances Hazardous to Health (COSHH)
- 4. Extreme Weather
- 5. Fire
- 6. First Aid
- 9 7. Insurance
 - 8. Manual Handling
 - 9. Tools
 - 10. Risk Management
 - 11. Risk Assessment
 - 12. Risk Benefit Analysis
 - 13. Transport
 - 14. Welfare incl. clothing, PPE, toileting, food & drink

Safeguarding Policy

- 1. Anti-bullying
- 2. Confidentiality
- 3. Child/vulnerable adults protection
- 4. Data Protection and handling/ICO

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- 5. DBS
- 6. Disclosure/accusation
- 7. Lost or missing child
- 8. Social Media
- 9. Staff, ratios, roles and responsibilities
- 10. Visitor Protocol



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UNIT 3 FOREST SCHOOL PROGRAMME: PLANNING AND PREPARATION HANDOUT 6: EXAMPLE RISK ASSESSMENT

The Hive: Generic Risk Assessment – Stave Hill Ecology Park

Carried out by: Caroline Leroi, Head of Organisation

Date: 01/03/2019

Re-assessment date: 01/03/2020

Each Hive training or facilitation session will include a **pre-session dynamic risk assessment**, which will be completed on arrival. All tutors to walk over their activity area each morning to check for rubbish, glass and any wildlife related risks (fox faeces, wasp nests, dead rats, etc...)

An **ongoing dynamic risk assessment** will also take place throughout the session. Where appropriate it may be shared with participants so they are informed of any measure and / or expectation on them.

PHYSICAL HAZARDS								
Hazard	Who is harmed and how		ecautions and Control easures in Place	Action by who	Action by When	Further Action Required (Y/N)		
bundaries	Participating learners and tutor Slips, trips, falls, collision, injury, getting lost	•	Grounds and activity locations checked daily for hazards and dynamically risk assessed against the proposed activity. Amendments made known to Head of Organisation Head of Organisation to agree site boundaries with Tutors. It is the responsibility of the Tutor to remind the participants of these boundaries on a daily basis.	Tutor	Start and end of each day	No		



		•	Participants to be supervised at all times during activities. Tutors to have a register of learners			
paths	Participating learners and tutor Increased risk of slips/ trips/ falls and falling in water	•	Activities supervised at all times Facilitator to instruct participants how to safely behave around pond Pond area checked prior to use	Tutor	Ongoing – esp. during wet weather	Yes: Tutor to carry out dynamic risk assessment in pond area before any activities take place
cy (including but not limited to fire / serious injury or missing participant)	Participating learners and tutor Risk of injury	•	All participants to be briefed on actions in the event of an emergency including meet area All participants to be briefed on the signs & signals of an emergency (whistle, bell, etc.) Practice of an emergency drill carried on the first day Emergency services contact list displayed in easily accessible area	Tutor	First Day of the course	
ties/ visitors / unknown individuals	Participating learners and tutor Injury, theft, access to learners	•	Venue chosen with security and supervision of learners in mind All tutors to be clearly identifiable at all times and made known to learners at the start of the course Contractors (pest control, tree cutting, etc.) and visitors to be met by Hive Tutors and signed in, being supervised if around participants	Tutor	Ongoing	Yes: Any new venue will be assessed specifically on this basis – Head of Organisation
	Participating learners and tutor Injury, disease	•	Venue chosen with security and supervision of learners in mind Learners to be supervised at all times Learners to be instructed to stay away from animals	Tutor	Ongoing	No
	Participating learners and tutor Inappropriate or unprofessional	•	All tutors are DBS checked, with references sought, online safeguarding training and where required First Aid certificated	Head of Organisation	Before employment takes place	No



		1				ı
tarps and ground sheet	Participating learners and tutor Slips, trips, falls, collisions, entrapment	•	All reasonable checks are done to ensure the competence of tutor prior to activity taking place Tutor are observed periodically by the Head of Organisation while delivering programme Tent will be erected according to instructions provided with purchase. Instructions to be kept in the tent bag Bell tent will be placed in area that will cause minimal obstruction. All group to be briefed on safe travel throughout the area of activity at the beginning of session. Ground sheet to be secured	Tutor	Ongoing	Yes: Tutors to practise erecting bell tent before use
		•	and placed in accordance with the instructions on packaging.			
ed shelters, camouflage netting, tarps	Participating learners and tutor Slips, trips, falls/ collisions, entrapment	•	Tutor to be briefed on the safe putting up and down, placement, storage and use of camouflage netting. Tutor to have been able to demonstrate understanding of equipment use Tutor to check the security and stability of any improvised shelters as the they are being erected If tarps shelters are being erected by learners they are to be checked by tutor before use	Tutor	Ongoing	No
/ refuse / wildlife related risks	Participating learners and tutor Cuts and ingestion	•	Only pick up litter, avoid hazardous materials/broken glass and medical waste Supervision for foraging activities Use gloves if appropriate All tutors to walk over their activity area each morning to check for rubbish, glass and any wildlife related risks (fox faeces, wasp nests, dead rats, etc) – in	Tutor	Ongoing	No



		particular around external fencing and in the ditches at the bottom of the field if using for improvised shelters/exploration			
wers, shredders and machinery	Participating learners and tutor Risk of injury	 All participants to be briefed on avoiding and staying clear of machinery All activities to be supervised at all times Ongoing risk assessment 	Tutor	Ongoing	No
l field entrance		 Gate and key access routes inside the sports field to be kept shut at all times – checks need to be made throughout the day 	Tutor	Ongoing	No

Hazard	Who is harmed and how	Control Measures in Place / Comments	Action by who	Action by When	Further Action Required (Y/N). If so, what and by whom
Insufficient or incorrect personal details received	Participating learners and tutor receiving medical care or pickup notification	 Medical and emergency contact details requested before course start 	Tutor	First day	No
Environmental and general allergies including: antiseptic hand wash; medication; natural stings; contact with irritants. Allergies to ingested foods such as: eggs, dairy, shellfish etc	ting learners and tutor Reaction and irritation	 Participating learners will disclose allergies within appropriate documentation prior to beginning of session. Choice of material purchased which will be appropriately adapted according to information on allergies of group and most common allergies. For example: latex free / vinyl or polyurethane coating for gloves for instance and plants/plant matter Choice of food ingredients purchased will be appropriately adapted to allergies Qualified First Aiders on site at all times 	All	Pre – course and ongoing	Tutors to carr out a daily dynamic risk assessment, c where appropriate.



		•	Areas of activity to be checked for any obvious irritants i.e. wasp nest/ plants Participating learners to be asked to wear gardening gloves when appropriate Participating learners and tutor are to clean hands and areas of contact with the above, upon completion of			
Severe allergies such as: Anaphylaxis from bee/wasp sting, contact consumption of nuts	axis and or other significant reactions	•	session. Significant known allergies requiring the carrying of an EpiPen to be briefed to tutor, including use, signs and symptoms of reaction. Individual to have at least 2 EpiPens or prescribed medication with them. The Hive reserves the right to refuse any participant who does not have the correct medication Where the irritant is an item of food it may be necessary to notify other participants to avoid this in their pack lunches wherever possible Choice of material purchased will be directly influenced by information on allergies of group and most common allergies. For example: latex free / vinyl or polyurethane coating for gloves for instance Qualified First Aiders on site at all times	Head of Organisation and then cascaded to all tutors	Pre- course and ongoing	Yes: participant to communicate any severe allergies to Hive tutor prior to course start. Head of Organisation to take preventative action where appropriate and ensure necessary medication is provided on first day.

OUTDOOR AND FOREST SCHOOL ACTIVITIES							
Hazard	Who is harmed and how	Control Measures in Place / Comments	Action by who	Action	Further Action Required (Y/N). If so, what and by whom		
Fire demonstration and fire lighting; use of bushcraft stoves; use of kelly kettles	, , ,	 All fire lighting sessions to be led by tutor with proof of experience and qualifications. 	Tutors		Yes: Tutor to dynamically assess the group's ability to manage their action		



	 Location for fire to be identified beforehand as adequate and away from overhanging trees or buildings Participating learners will be given a safety brief on camping stoves and fire. Tutor will ensure that direct supervision is maintained at all times during the relevant activities Kelly kettles / bushcraft stoves to be used in line with manufactures instruction Participating learners are shown how to start a fire safely / use a bushcraft stove safely / use a Kelly kettle safely Tutor to carry sources of ignition only and when given to young people they are directly supervised Observers to stand back away from fire / stove / Kelly kettle Participating learners instructed to not pick up burning wood Participating learners instructed to not throw objects onto fire / stove / Kelly kettle Participating learners instructed to secure any loose clothing or long hair around fires and stoves Means of extinguishing kept near the fire / stove at all times At least one tutor with current first aid qualification present at all times. First aid kit kept close to activity at all times, including a fire blanket. To be kept near fire at all times. Fire starting materials and stove Hexamine fuel to be kept away from 	Before and during activity	before activity and provide appropriate supervision and guidance during planned activity.
Whittling, wood carving and tu building and use of knives, aces, saws, billhooks and drills	Participating learners to be shown in detail how to whittle and carve safely.	Before and during activity	Yes: Tutor to carry out dynamic risk assessment before activity and assess the group's ability to manage their action and behaviours in a suitable manner



		 Participating learners who are not carving are instructed to never to enter the safe zone Participating learners should only be carrying sharp implements if instructed to do so by a tutor member Activity to always be carried out on level ground Participating learners to always use good quality and age appropriate equipment Participating learners instructed to always hold the knife in their dominant hand Participating learners instructed to wear a protecting glove on the noncarving hand at all times Direct supervision at all times for whittling and wood carving activities At least one tutor with current first aid qualification present at all times First aid kit kept close to activity at all times Any cut should be covered and dressed and Head of Organisation should be informed as appropriately 			during the planned activity and adjust as required.
Hand tool storage	ting learners and tutor burns	 When not in use, all tools to be stored safely within a closed unit (preferably locked) such as a tool box and then secured in a locked cupboard. When not in use all matches and fire lighting equipment to be stored safely within a closed unit (preferably locked) such as a tool box and then secured in a locked cupboard. 	Tutors	During activity	No
Foraging	ting learners	 Session should be led by tutor Working area and activity should be risk assessed pre-session Learners' medical forms should be double-checked before session to identify any potential plant allergy Learners should be shown how to identify each foraging plant and should be briefed on potential dangers at the start of the session Tutors should plan to focus on species he/she is confident about identifying Facilitators to provide gloves if necessary (nettles, brambles, etc.) 	Tutors	Before and during activity	Yes: Tutor to carry out dynamic risk assessment before foraging and identify and potential additional hazards.



Open fire cooking	ting learners and tutor	 First Aid procedures in place and First Aider on site Keep First Aid kit close by Session should be led by tutor Working area and activity should be risk assessed before the session Session Lead should have suitable Food Hygiene Certificate Food hygiene regulations should be followed Participant's medical forms should be double-checked before session to identify any potential food allergy Participant's information forms should be double-checked before session to identify any reasons, such as religious reasons, that would prevent learners to handle or consume certain food types Antiseptic wipes or soap and water should be kept nearby for hand washing First Aid kit kept nearby When cooking with a stick use green wood and remove bark before cooking, using a pen knife and scraping action Food should be split open to check it is cooked before consumption Cooked food should never be reheated Foods that need a lot of fat to cook should be avoided in case of pan fire Participants instructed to tuck in long hair and roll up or fasten loose clothing 		Before and during activity	Yes: Tutor to carry out dynamic risk assessment before cooking, identifying if the activity is appropriate for the group and amending accordingly.
Educational equipment / & crafts materials	ting learners	 Session should be led by tutor Equipment and activity should be risk assessed before the session Session Lead should inspect all equipment before the session Equipment should be used according to manufacturer's instructions Equipment should be kept clean and in good working order 	Tutors	Before and during activity	Yes: Tutor to carry out dynamic risk assessment before activity, identifying if the activity is appropriate for the group and amending accordingly.



ENVIRONMENTAL CONSIDERATIONS						
Hazard	Who is harmed and how	Control Measures in Place / Comments	Action by who	Action by When	Further Action Required (Y/N). If so, what and by whom	
Disturbance of ecosystems and environmental/noise pollution	d larger ecosystems and Participants	 Consideration will be made as to the positioning of any shelter, habitat boxes, rugs and other heavy large objects Noise pollution will be kept to a minimum during session, with as little speaker use as possible in order to prevent undue distress to the local ecosystem. Appropriately disposing of refuse in order to minimise are impact on the local and larger environment. Using things such as: recycling waste, biodegradable products, keeping antiseptic hand wash station in a sterile location where the local ecosystem cannot be affected by its presence. 	Head of Organisation	Pre- course and end of course	Yes: Tutors to ensure that large equipment and heavy objects placed on differing ground where possible to minimise impact on local ecosystems.	
Weather	nts and tutor hypo/hyperthermia	 Alternative venues and shelter available at all times Access to suitable clothing for the 	Tutor	Ongoing	No	



weather	
conditions	
forecast – kit list	
provided as part	
of joining	
instruction; spares	
available including	
hats in hot	
weather.	
Access to fluids	
and food as	
required.	
Participants asked	
to bring sun	
cream in joining	
instructions. To	
avoid allergies,	
the Hive will	
provide suncream	
for participants	
only after gaining	
permission from	
parents.	
Access to and	
support in	
application of sun	
cream for tutor.	



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UNIT 3: FOREST SCHOOL PROGRAMME PLANNING AND PREPARATION HANDOUT 7: FS RISK BENEFIT ASSESSMENT FORM

Location	
Assessor	
Date	
Review date	

Your overall risk rating – low, medium or high – is based on your judgement about whether the BENEFITS of the activity or opportunity outweigh the RISKS.

ACTIVITY	How will young people BENEFIT from this activity?	Possible hazards	Who is at RISK?	PRECAUTIONS in place to reduce the risk of injury	Risk RATING: L/M/H
POND DIPPING: Slippery pond decking or edges	The decking allows close access to the contents of the pond and is an essential component of exploring this habitat.	Slips, trips and falls. Cuts, grazes and abrasions. Drowning.	Young people; adults	 Banks shallow and planted to prevent accidental entry. No access to banks for participants; use decking or 'beach' area. Deepest area is centre of pond – keep to edges. Perimeter kept clear of dense or high foliage so pond edges are clearly defined and can be seen / avoided. Dipping platform kept clear of trip hazards (e.g. nets, trays) Pond use rules clearly displayed & reviewed before each session. 	Low



ACTIVITY	How will young people BENEFIT from this activity?	Possible hazards	Who is at RISK?	PRECAUTIONS in place to reduce the risk of injury	Risk RATING: L/M/H



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UNIT 3: FOREST SCHOOL PROGRAMME PLANNING AND PREPARATION HANDOUT 8 AND 9: FOREST SCHOOL PLANNING

Starting Points					
<u>Outcomes</u>	Game	<u>Challenge</u>	Interests/strengths of		
(Needs of the group)			the group		
Group is a new group so	Sleeping	Making a Bear	_		
creating a feeling of comfort	Bear	Den	T: Looking at nature and		
and connection is a priority.			observing		
 Social skills 			M: Creativity and		
 Confidence (especially 	<u>Story</u>	<u>Hook</u>	making		
with climbing)	The Bear	Where do you	S: Digging and worms,		
 Independence 	Who	think we would	climbing		
 Communication and 	Stared	find a bear in	F: Being in the woods		
Language	by Duncan	the woods?	Th: Climbing, exploring		
 Familiarity with the 	Beedie	What food do	B: Being in the woods		
environment		you think they			
	-	would eat?			
Resources	Where mi	ght the children	What have I got up my		
Phone and tablet	<u>ta</u>	ke this?	sleeve?		
 Snacks: Crackers and 					
apples	Pretending to be bears		Following the leader		
Wet wipes	Going on a bear hunt		back to the hall or		
 First Aid kit accident 	Trying out their bear houses		around the woods or		
forms and pen			climbing on the		
Water bottles			equipment in the		
 Owl, bird and hedgehog 			woods (wobbly bridge,		
toys			stepping stones or		
Boundary ribbons			climbing frame)		
Risk Benefit Analysis	Re	flection	Evaluation of session		
Benefits:					
 Pleasure and fun 	Fairy Cottage	e: Smiley Face and	Group needed support		
 Develop social skills 		lrawings on the	to transition and move		
Develop ability to create	ground and discuss feelings		back to the Fairy		
own play experiences		ments during	cottage for reflection		
Explore sense of creativity	the	esession	time.		
<u>Risks</u>			Challenged the group to		
 Bumps, trips and falls 			find a bird/woodland		



A posiation abou		avantuun aank ta talua
 Anxieties about 	it	creature each to take
environment		back to the cottage.
 Anxieties about 	it engaging	
in the activitie	s	

WEEK	Brief Summary of Activities	Learning Objectives	Classroom Follow up
1	TRACKS AND TRAILS Intro – snacks, rules and names Game – 1, 2, 3 Where are you? Activity – walk round site showing boundaries, risks and hazards. Play trail maker game (see page 98,99 in Learning From Nature). Challenge task - Look for evidence of animal tracks in woods and try to identify what kind of animal made the tracks (see pg 96,97 in Learning From Nature) Additional resources – Camouflage materials and face paint. Locate long sticks to create trail	Familiarity in the environment Recognising and developing knowledge of animal features	Research into animal habits and features of their footprints and camouflage in nature
WEEK	Brief Summary of Activities	Learning Objectives	Classroom Follow up
2	USING OUR SENSES Intro – snacks, rules and names Game - Bat and Moth (page 48, 49 in Learning from Nature) Activity – Walk around site and revisit boundaries, risks and hazards. Use a feely bag of items found in the woods and as a group pass the bag around, each child is wearing a blindfold and each take an item to describe and name. Challenge task – Create a blindfold trail for a friend to follow using ropes around the site. Additional resources – Blindfolds, rope and feely bag of objects.	Develop sensory confidence using blindfolds and social connections across the group	70



3	PLANTS AND TREES Intro – snacks, rules and names. Revisit boundaries and areas that can and cannot be used for play. Also revisit hazards and risks in the area (including plants) Game - Plant Duplication (pg 35 from Learning with Nature) Activity – Leaf puzzles (pg 38 from Learning with nature) Challenge task – Create a leaf image using the art materials provided Tools – Use hammers to create leaf print on fabric Additional resources – Hammers, clay, fabric, selection of leaves	Introduce tool area and evaluate tool confidence in the group	Tree knowledge and resources
---	--	--	------------------------------

WEEK	Brief Summary of Activities	Learning Objectives	Classroom Follow up
4	WOODLAND FAIRIES Intro – snacks, rules and names. Revisit boundaries and areas that can and cannot be used for play. Also revisit hazards and risks in the area (including plants) Game - Tree Tag (pg 36 "You're only safe if" Learning with Nature) Activity – Use the names of some trees/plants around the site and write them on folded pieces of paper. Each child picks a piece of paper and they have to make a forest fairy using clay and the resources from that tree/plant Challenge task – Make a fairy house for your fairy using any materials you can find Tools – Introduce the drill tool to anyone who is interested Additional resources – Clay, tree/plant labels	Recall of tree knowledge and introduce new tool : Palm drill	
5	AUTUMN HUNTERS Intro – snacks, rules and names. Revisit boundaries and areas that can and cannot be used for play. Also revisit hazards and risks in the area (including plants) Game - Treasure Hunt. Split group into 2 teams. Give each team an orange to hide in the woods. Each team has to draw/build a map for the other team to find their missing orange	Develop knowledge and awareness of autumn changes	



WEEK	Brief Summary of Activities	Learning Objectives	Classroom Follow up
6	Fire at designated fire area Intro —snacks, names and rules (including fire safety ones e.g. Walk around the edge song and respect position) Activity - collect dry happy snappy sticks; discuss fire triangle (fuel, flame, oxygen); check hair is tied back/no hats etc on; practise creating 'dragon sneeze' using fire steel; create tipi structure with stretched out cotton wool balls, Vaseline and scrunched up newspaper surrounded by kindling wood and thin sticks, light cotton wool in gaps, add thin sticks first then move to thicker ones; chn to prepare their own pocket pizzas with chosen ingredients, wrap in foil and toast on fire using embers; invite chn two at a time to toast a marshmallow on a kebab stick whilst waiting for pizza pockets to cook; chn to pour cups of water to extinguish the fire when finished If time read a story whilst they are eating. Additional resources — Water Fire pit Fire lighting eqpt — kindling wood, cotton wool, newspaper, Vaseline, fire steels Fire gloves Plastic cups 14 x mini pitta breads, tomato pizza sauce, grated cheese, tinned sweetcorn, sliced olives Spoons, knives, sharp knife Foil Marshmallows Kebab sticks	Learn about fire safety and following instructions to make Bonfire pizza	Fire safety posters and awareness

WEEK	Brief Summary of Activities	Learning Objectives	Classroom Follow up
7	Intro – Snacks, rules and names		



	Game – The tree game on the field/Ninja game (page 69 of Learning with Nature) Activity – Skeleton/halloween faces on a log cookie using glow in the dark paint and a bow saw. Challenge task – Can you find a way of creating a trail through the woods using our Halloween faces to help us? Additional resources – Paintbrushes, glow in the dark paint and spare log cookies if needed.	
8	SPIDERS – Week 1 Intro – Snacks, rules and names Game – Ninja/Owls and mice (page 50 of Learning with Nature) Activity - Making spiders using log cookies. Saw the log cookies and start drilling the holes for the legs using a hand drill. 2 children sawing at a time using the bow saw and 1 child at a time to drill with adult support. Challenge task – Can you make a home for your spider? Additional resources – Hand drill, fishing wire, black pipe cleaners, string	

WEEK	Brief Summary of Activities	Learning Objectives	Classroom Follow up
9	SPIDERS - Week 2 Intro – Snacks, rules and names Game – Owls and mice (page 50 of Learning with nature)/Sardines Activity – Week 2 of making spiders. Continue drilling holes – 1 child at a time and threading black pipe cleaners through the 8 holes and threading fishing wire through the hole in the middle. Challenge task - Spider web challenge. Additional resources – Hand drill, fishing wire, black pipe cleaners, string, ropes		
10	NIGHT TRAILS Intro – Snacks, rules and names Game – Torch tag Activity – Create a night time trail using pebbles and other glow in the dark objects Challenge task - Can you create a glow in the dark object to help you in the forest? Additional resources – silver pebbles, glow in the dark paint, paint brushes		



WEEK	Brief Summary of Activities	Learning Objectives	Classroom Follow up
11	STARGAZING Intro – Snacks, rules and names Game – Torch tag/Otter steals fish (Page 51 of Learning with Nature) Activity – Making a star constellation display using a pringles tube, black card and a bradawl. Challenge task - Can you create a star constellation using other materials? Additional resources – empty pringles tubes, black card, torches		
12	Shadow puppets Intro – Snacks, rules and names Game – Torch tag/Hunt the leader Activity – Create a shadow puppet using black card and stick to hold Challenge task - Can you create a puppet show using your puppets? Additional resources – lolly sticks or plant sticks, black card, pencils/white chalk, scissors		

WEEK	Brief Summary of Activities	Learning Objectives	Classroom Follow up
13	Fire at designated fire area Intro —snacks, names and rules (including fire safety ones e.g. Walk around the edge song and respect position) Activity - collect dry happy snappy stick if needed; discuss fire triangle (fuel, flame, oxygen); check hair is tied back/no hats etc on; practise creating 'dragon sneeze' using fire steel; create tipi structure with stretched out cotton wool balls, Vaseline and scrunched up newspaper surrounded by kindling wood and thin sticks, light cotton wool in gaps, add thin sticks first then move to thicker ones; chn to prepare their own pocket pizzas with chosen ingredients, wrap in foil and toast on fire using embers; invite chn two at a time to toast a marshmallow on a kebab stick whilst waiting for pizza pockets to cook; chn to pour cups of water to extinguish the fire when finished If time read a story whilst they are eating. Additional resources —		



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Water, Fire pit, Fire lighting eqpt – kindling wood, cotton wool, newspaper, Vaseline, fire steels, Fire gloves
Plastic cups Spoons Knives Sharp knife Foil
Marshmallows Kebab sticks Apples Sugar & cinnamon mix
(Stick an apple half onto a kebab stick and cook over the fire until the skin loosens and peels off, dip the apple into the sugar mix and cook until caramelises. Once cool then eat)
Hot chocolate in a flask to share



UNIT 4

FS PROGRAMME: PRACTICAL SKILLS





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UNIT 4: FOREST SCHOOL PROGRAMME PLANNING AND PREPARATION HANDOUT 1A: TOOL USE: STEP BY STEP SCRIPTS FOR SAFE USE

BOW SAW

- This is my Bow saw
- This is the handle
- This is the blade
- This is the blade cover... it comes off like this
- This is the cutting edge
- I hold my bow saw like this
- I walk with my bow saw like this
- When I use my bow saw I wear a glove on my helping hand
- I use my bow saw to cut logs that are bigger than a 50p piece
- When I use my bow saw I use it two arms and a tool length away from everyone else who is not my partner. This is my blood bubble.
- I saw with my bow saw like this
- When I have finished with my bow saw I replace the blade cover and put it on the ground like this or I take it back to the tool box area

PALM DRILLS

- This is my palm drill
- This is the handle
- This is the drill
- I hold my palm drill like this...
- When I use my palm drill I sit on a log or chair with my ankles and knees together
- I use my palm drill to drill holes into wood or sticks
- When I use my palm drill I use it two arms and a tool length away from everyone
- I pass my palm drill like this... (handle first)
- I twist my palm drill like this...



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UNIT 4: FOREST SCHOOL PROGRAMME PLANNING AND PREPARATION HANDOUT 1B: TOOL USE: STEP BY STEP SCRIPTS FOR SAFE USE

BILL HOOK

- This is my billhook
- This is the handle
- This is the cover
- I take the cover off like this
- This is the blade
- This is the cutting edge
- When I have finished with my billhook I put the cover back on like this...
- I stand with my billhook like this
- I walk with my billhook like this
- I pass my billhook like this
- When I use my billhook I have bare hands
- When I use my billhook I use it two arms and a tool length away from everyone else who is not my partner. This is my blood bubble.
- I use the billhook to split wood
- When I am not using my billhook I put it down with the handle facing forwards and the blade facing in
- When I have finished with my billhook I replace the cover and put it on the ground like this or I take it back to the tool box area

SHEATH KNIFE

- This is my sheath knife
- This is the handle
- This is the sheath
- I take the sheath off like this
- This is the blade
- This is the cutting edge
- When I am not using the knife I put the sheath on like this
- I stand with my sheath knife like this
- I walk with my sheath knife like this
- I pass my sheath knife like this
- When I use my sheath knife I use it two arms and a tool length away from everyone else who is not my partner. This is my blood bubble/safe circle
- When I am cutting string or whittling I wear a glove on my helping hand
- When I am not using my sheath knife I put it down with the handle facing forwards and the blade facing in
- When I have finished with my bill



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UNIT 4: FOREST SCHOOL PROGRAMME - THE WOODLAND ENVIRONMENT HANDOUT 2: RESOURCES FOR EFFECTIVE TOOL MAINTENANCE AND STORAGE

STORAGE AND GENERAL CARE

- Keep all tools clean and dry. Carry a rag with you to wipe off the handles in wet weather. Keep edges free from mud, or they will dull very quickly. Clean tools immediately after use. If mud is left to harden, tools will be more difficult to clean and sharpen.
- Oil all metal parts before storing to prevent rust. Ordinary vegetable oil is suitable.
 Wipe unvarnished wooden handles with linseed oil when new and occasionally thereafter, as this helps keep them supple.
- If handles are rough or splintery, sand them smooth. Nicks in metal handles should be removed by filing.
- Store tools in a dry, well aired building, preferable in racks or on wall brackets. Keep similar tools together.
- Hang bowsaws with the blade tension released
- Edged tools should be protected with plastic guards or with sacking or similar
- In cars, tools should be transported in a boot or covered hatchback area, preferably in a strong container





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SHARPENING EDGED TOOLS IN THE FIELD

Edged tools should go into the field sharp. Major sharpening is a workshop task and is to be avoided in the field.

- Sharpen tools at least twice a day when in use, or more often as necessary. Axes and billhooks should be checked whenever you use them.
- Use the correct whetstone for sharpening each tool. Cylindrical (cigar shaped) or flat (canoe shaped) stones can be used for billhooks. Axes are best sharpened with flat rectangular stones or round stones, fine on one side, coarse on the other.
- Stones are fragile, and should be carefully stored and transported in a box. Broken stones are dangerous and should not be used.
- With a combination stone, use the coarse side first to eliminate and flaws and bring to an edge, and then the fine side after to give and even taper and good polish.
 Sharpen with small circular motions, as this is safer than sweeping the stone along the edge, and is easier to use.
- To check for sharpness, sight along the edge. You should see a uniform taper with no light reflected from the edge itself. Reflected light indicated a dull spot, so keep sharpening until this disappears. **Don't touch the edge to check for sharpness.**



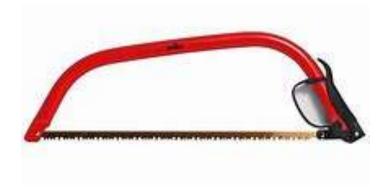


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Watch this McQBushcraft video for a detailed description about sharpening knives. https://www.youtube.com/watch?v=RmOGFaswgkl

SAW MAINTENANCE

- Oil blades frequently. When sawing through trees with resin e.g. pine trees, keep blades clean and free-cutting by dousing them with an oiling mixture of 7 parts paraffin, 2 parts white spirit and 1 part lubricating oil. Wear gloves to protect your hands.
- Change bow saw blades when they are blunt or have lost their 'set'. Blunt blades are
 not worth resharpening, and should be removed from the saw and broken in half to
 avoid re-use and dispose of safely.
- To change the saw blade, first release the tension. If this is hard to do by hand, put the saw on the ground with the frame upright and the blade pointing away from you, and pull back on the lever, using a metal bar if necessary. Then put your foot on the lever to hold it, and push the saw frame away from you.
- Remove the rivets, position the new blade and then replace the the rivets. Retension the blade by pressing the lever against the ground until it closes.
- A bow saw blade must be under high tension to cut straight. Increase the tension by fixing the blade using the inner holes of the pair at each end of the blade. The frame can be opened when held in a vice to increase the blade tension.





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UNIT 4: FOREST SCHOOL PROGRAMME PLANNING AND PREPARATION HANDOUT 3: FIRE PIT GUIDANCE: MAP AND VISUALS

FIRE PIT CONSTRUCTION

- 1. Carry out all site risk assessments
- 2. Design the fire area to fit the site you will use
- Create a map/plan of how the area will be developed
- Create a timescale for when stages of the map/plan will be completed
- Construct a resources list
- 3. Investigate the ground and soil to understand the make up of the soil and what could be flammable. In most woodlands the soil is made up of leaf litter, which creates a peat like soil so if not taken care of an underground fire could occur without being noticed
- 4. Clear the top layer of leaf litter. Dig down to expose the soil and investigate. (If top soil is flammable consider having a sunken fire pit sat on non-flammable soil below.)

Clay	Non- flammable	If the soil is dense (without much air) it is less likely to catch fire
Stony/soil	Non- flammable	
Brown muddy soil	Non- flammable	
Peaty	Flammable	
Light, fluffy woody	Flammable	
Leaf litter	Flammable	



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5. The area around the fire area needs to be free of trip hazards to avoid falling into the fire and also if hot food or water is going to be carried.

Plants, brambles	Trip hazard	Use correct tools and gloves to remove
Logs, sticks	Trip hazard	Use correct tools and gloves to remove (keep for firewood or building animal habitats)
Holes, lumps	Trip hazard	Fill in and flatten to level ground
Roots	Could become exposed to create trip hazards after site has been trampled and used	When removing consider the the environmental impact. Will it effect a nearby tree or plant?
Overhanging branches	Fire hazard	Use correct tools and procedures to cut down any branches that could catch fire

6. Use the kneeling position to prevent injury around the fire. Use fire gloves to remove pots and pans off the fire.

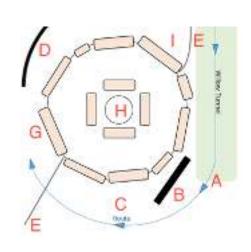
7. Site maintenance

- A bucket of water should be near the fire at all times (for extinguishing and treating burns. You may choose to have 2 containers)
- Fire area should be clear and free of trip hazards
- Check the fire area for other people's debris (could be hazardous)
- Keep fires small and usable
- Once fire is finished spread the fireout and allow it to die down
- Use stored water to douse the fire before leaving the site
- All food debris and rubbish should be removed to prevent vermin



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FIRE PIT DIAGRAM 1



- A. Enter from this side
- B. Entry log. This seat creates a barrier to stop people walking straight into the fire area
- C. Direction of movement. Walking behind stops people walking near or across the fire
- D. Wind shelter. A fence to create a wind break and stop people from approaching fire. Could include a sign directing towards the entrance
- E. Emergency fire exit
- F. Log benches
- G. People step over the log to sit down
- H. Fire pit/bowl
- I. Everyone exits here to avoid collisions

FIRE PIT DIAGRAM 2



Carry out soil assessment first before building.

If soil is high risk build an outer ring of stones or logs may be used to create a further barrier between the fire and the surrounding soil

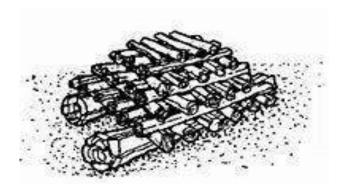
N.B Porous rocks can explode or split if heated so choose your rocks carefully



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UNIT 4: FOREST SCHOOL PROGRAMME PLANNING AND PREPARATION HANDOUT 4: STEP BY STEP FIRE MAKING PROCESS HEALTH AND SAFETY

WAFFLE OR PYRAMID METHOD



Before building your fire make sure you forage for as much firewood as possible beforehand. Make sure you have a selection of kindling (the smaller/finer sticks) as well as tinder (cotton wool, hay or other material) and organise the firewood into piles starting with the smallest up to the biggest.

- 1. Place the first layer of the waffle/pyramid (using sticks no wider than the width of your little finger) with even spaces in between stick.
- 2. Layer up the waffle/pyramid using similar/slightly smaller sized sticks until you have at least 3 or 4 layers (you could add up to 5 or 6 layers if you're making a fire on the ground or in a firebowl) on top to create a platform.
- 3. On the top layer add the tinder with some kindling
- 4. Ignite the fire and add a handful of kindling straight away and keep feeding the fire using the firewood you've collected at regular intervals





T#E#IVE

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TEPEE METHOD



Before building your fire make sure you forage for as much firewood as possible beforehand. Make sure you have a selection of kindling (the smaller/finer sticks) as well as tinder (cotton wool, hay or other material) and organise the firewood into piles starting with the smallest up to the biggest.

- 1. Build a platform using 3 or 4 flat pieces of kindling
- 2. Place some tinder at the centre of the platform and place a bit of kindling on top
- 3. Place the 2- 4 of the thinnest sticks around the tinder and kindling before igniting the fire
- 4. Keep adding the fuel around the fire using the organised piles of firewood you collected







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FIRE PYRAMID



When building your fire and keeping it alight always remember the elements that will keep your fire going. If your fire is going out try to identify which part of the triangle needs attention.



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UNIT 4: FOREST SCHOOL PROGRAMME PLANNING AND PREPARATION HANDOUT 5: RESOURCES FOR ROPES, KNOTS AND SHELTERS TECHNIQUES

ROPE AND CHORD

Suppliers of rope and chord:

http://www.ropesdirect.co.uk

http://www.ropesandtwines.com

http://www.skylandequipment.com/tree-rigging/rigging-rope.html (For rope swings recommend static rope with breaking strain of 20 kn plus)

For paracord look at the Forest school shop or Muddy Faces websites:

http://www.forestschoolshop.co.uk

http://www.muddyfaces.co.uk

Resources for building rope swings and treehouses

For details of how to build a variety of rope swing, shelters and treehouse structures, you should read the following documents:

https://www.forestry.gov.uk/pdf/fce-rope-swings-dens-fires.pdf/\$FILE/fce-rope-swings-dens-fires.pdf

http://www.monkey-do.net/content/tree-swings



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KNOTS - HALF HITCH



1. Place the rope around the tree with the working end on the left and the standing end on the right.



2. Pass the working end over the top of the standing end and bring it back upon itself to make the hitch and pull tight.

KNOTS - TIMBER HITCH



1. Create a half hitch on the tree to start



2. Twist the working end around the rope next to the tree



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3. Keep twisting the rope around until you have gone around

the rope three times



4. Pull both ends tight until the rope is tight against the

KNOTS - TAUT TARP HITCH

1. Start the know by creating a half hitch
Wrap the working end around the back of the tree back towards the front of the tree
3. Take both ends to form a triangle in front of you



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4. Take the working end and pass it over the top of the standing

end and bring t back towards the tree



5. Make a loop in the working end and push it up through the gap in the triangle



6. Pull the loop up towards



7. Pull the loop up until the knot is tight. (You can add another loop and pull it through the first loop to make it tighter.)

KNOTS - SIBERIAN HITCH



1. Pass the rope around the tree and lie both ends on top of your palm



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2. Take the end nearest the end of your fingers and wrap them

around your hand once



3. Twist your hand until your fingers are pointing upwards and on

the other side of both sides of the rope



4. Pinch the end of the rope closest to your hand



5. Pull it through the rope to make a loop



6. Pull the loop tight to create the knot



7. Add another loop in the end of the rope if you want to make it

tighter



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KNOTS - SLIP KNOT



1. Make a loop on the left of the rope before making another one on the right (see the start of the Clove hitch with hitches)



2. Take the loop on the right and pass it up and through other I loop



3. Pull the knot tight. If done correctly then the knot should lip

up and down the rope

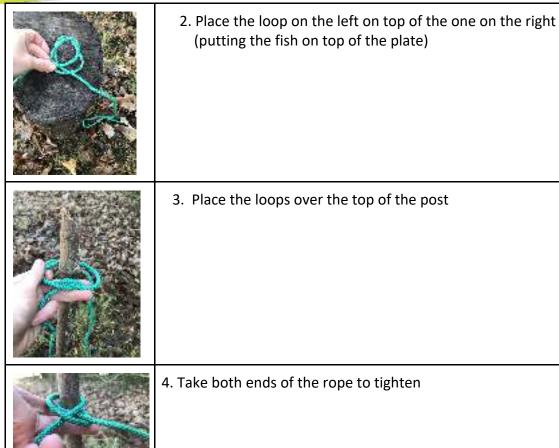
KNOTS - CLOVE HITCH WITH HITCHES



 Make two loops in a rope - starting with the loop on the left (making a fish and then a plate)



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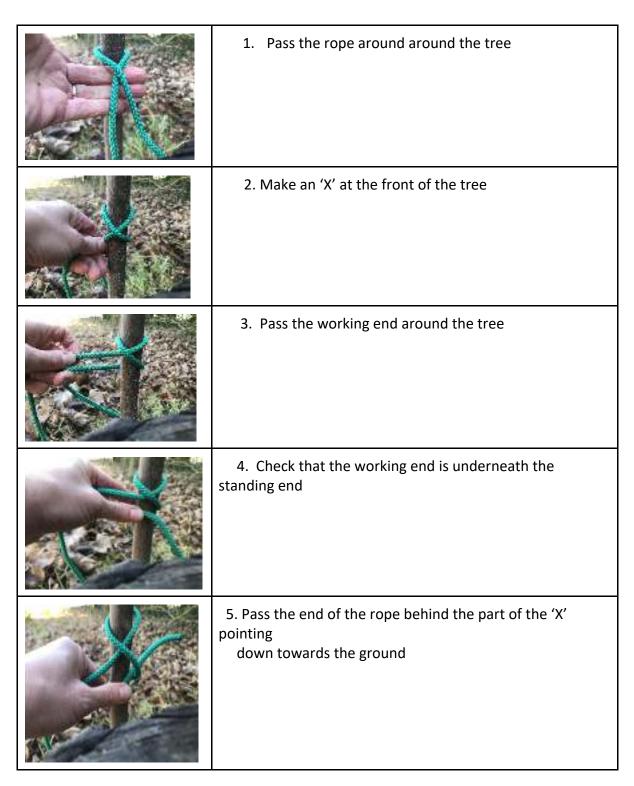


5. Pull the rope tight against the tree



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KNOTS - CLOVE HITCH WITH ENDS





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6. Pull both ends of the rope to make it tight

KNOTS - SQUARE LASHING

1. Make a clove hitch on the end of one stick
2. Place another stick across the stick above the clove hitch
3. Take the working end of the rope to go over the horizontal stick
4. Keep passing the rope over and under both sticks until you have passed the rope around the sticks three times.



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5. After the third lashing frap the rope in between the sticks, pulling it tight as you go and tie the ends using a reef knot

KNOTS - PRUSIK KNOT



1. Hold a loop in front of a ridgeline between two end



2. Pass the loop over and behind the ridgeline, keeping the loop in

between the two ends.



3. Pass the loop over the ridgeline another two times - keeping the

loop in the middle each time and pulling it tight each time.



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4. Once you have six lines on the ridgeline take a hold of the ends of

the rope and keep the loop open

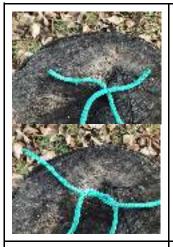


5. Pass the ends in, down and through the loop



6. Pull the ends tight. Test the knot by sliding it up and down the ridgeline before tying the knot to a tarp.

KNOTS - REEF KNOT



1. Take the right end of the rope and pass it over the left and pass it under



2. Take the left end of the rope and pass it over the right and pass it under



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3. Pull the ends tight to make the knot

BOOKS AND RESOURCES FOR KNOTS

Further resources

Book: "Knots Step-by-step" by Des Pawson and published by Dorling Kindersley

Website: http://www.animatedknots.com

App: "Animated knots by Grog"

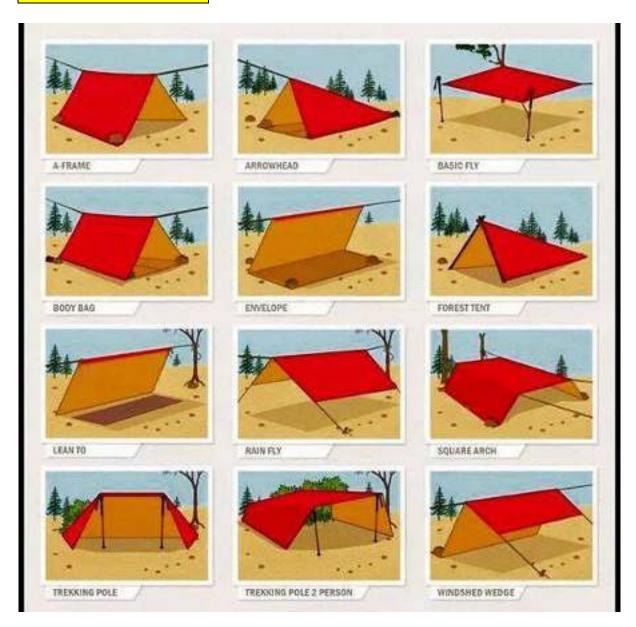
"Knots Art - 3D"



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UNIT 4: FOREST SCHOOL PROGRAMME PLANNING AND PREPARATION HANDOUT 6: OVERVIEW OF STRUCTURE TYPES: TARPS AND NATURAL DENS

TYPES OF TARP SHELTERS



The best tarps to use are the DD tarps, which come in various sizes
You can buy them from their website https://www.ddhammocks.com/products/tarps
or from other sources such as the Forest school shop or Muddy faces



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TYPES OF NATURAL DENS

Debris shelters



- 1. Create a tripod structure using one pole as long as as your body to make the ridgeline and two shorter poles with a V shape at the top
- 2. To make the rib cage use a series of logs that lean against either side of the ridgeline pole
- 3. Once the structure is complete cover the shelter with leaves or other material to keep you dry once inside

Useful videos:

https://www.youtube.com/results?search_query=bushcraft+shelter

https://www.youtube.com/watch?v=Cfx6I0rajOo



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Lean to shelters



- 1. Find 3 poles with a Y shape at the top of each one and saw to make them equal in length and whittle the end of each one to make spiked ends and put them in the ground at equal distances
- 2. Place a pole across the top of the three poles to make a frame
- 3. Use poles to lean against the back of the frame towards the horizontal pole
- 4. Cover the back frame with as many as poles as you can to cover the poles to create warmth



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UNIT 4: FOREST SCHOOL PROGRAMME PLANNING AND PREPARATION HANDOUT 7: MAKING A MUD KITCHEN

Source Jan White, Muddy Faces

Guidelines for Creating a Mud Kitchen

There is little more important in our physical world than earth and water and they are truly intriguing things, especially when they interact. Mixing soil, water and a range of other natural materials has a foundational role in early childhood which has deep importance and endless possibilities for well-being, development and learning. The breadth and depth of what these experiences offer young children is truly remarkable. Mud kitchens provide something quite different to a soil digging patch, whilst also being much more easily managed. A mud kitchen includes elements of the much-loved domestic corner and cooking from indoor play, which are then hugely enriched through the special nature of being outside. Mud kitchens work well all year round, and need to be seen as a core element of continuous provision outside.

Mud kitchens do not need to be fancy and certainly do not need to cost much. There is nothing to beat the simplicity and character of creating your own unique kitchen from scrounged, begged and discovered items. And remember, the best mud kitchens are made in collaboration with the children who will be using them.

Choose the Place

The kitchen needs a handy and ample supply of the basic materials of sand and/or mud.

Offering both provides contrast in colour, texture and mixing behaviour – and many more possibilities for imaginations. Being situated near the sand area or mud patch may give the kitchen more context and meaning, but big pots of these basic materials will also be fine, preferably at floor level for ease of access.

Mud kitchens that have walls, fences or other vertical surfaces on one or two sides then have potential for hanging pots and utensils on them or for installing shelving, making it feel more kitchen-like and better to use. A corner also creates room-like enclosure that feels cosy and safe, which research suggests is good at generating dramatic play in young children.



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A water supply is essential, but it does not need to be in the kitchen or even close-by, as children love to fill containers both large and small to transport across to the kitchen for use. Make sure however that there are several types of collecting containers for this activity and an ample (preferably running) water source, such as an outdoor tap, water butt or a large container of water.

Gravel, pebbles and other natural materials are also natural companions for concoction making. If these are not generally available in the outdoor space, then good- sized containers need to be kept topped up for good supplies (consider drainage of these if kept in the open air).

Plant material is also an important ingredient of a good mud kitchen.

This can be anywhere – children just need permission to pick and gather – and some agreed boundary rules so that plants can keep supplying! Lots of robust, pickable plants spread around the whole outdoor space are ideal.

One last thought is to locate the kitchen near to compatible activities, such as good places for den play, as these complementary aspects of provision will enhance each other, enriching experience for the children.

Make the Space

Kitchens can be all sizes, but the size will influence the feel of the place and, therefore,

probably the kind of activity that takes place. Room for several children to work alongside or in collaboration seems important. Large, open-plan kitchens may well generate more boisterous themes and actions. A choice of both large and small nook- like kitchens would be ideal in a group setting.

Enclosure from fences and walls (as above) or by installing low level boundaries such as wicker fencing (so that children can see over but the space feels enclosed by them) can create a good mud kitchen feel.

A roof is not necessary as this would prevent the elements being part of the stimulus and range of experiences.

Some kitchens that are in the middle of an open sand/digging area work fine too, but perhaps have less sense of being a special place.



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In creating some sense of enclosure, it's important not to separate the kitchen from the rest of the outdoor space. It needs to be easy to get in and out and to see in and out, and it needs to interact with whatever else is going on outdoors.

Working surfaces are a crucial element. These need to be at the right height for the children and to provide enough space to work at, with all the mess that creative kitchen work entails.

Shelving and cupboards add much to the feeling and functionality of the kitchen. It's really helpful if each pot and utensil stands out by itself (compared to the jumble of a box full of stuff) and is easy to get at.

Hooks on walls or the front edge of shelves (beware that hooks are not at eye-poking height). Baskets to separate types of utensil can be useful. Finally, consider where all the old mixed material is going to go after use!

Fit it Out

- An old cupboard or two; a dresser is perfect!
- Work top with plenty of surface to work at.
- Something to be the cooker in pretend play (an old microwave can be very effective, having a very satisfying door to open and close, and buttons to push)
- Shelving above and behind the work surface, or a tall cupboard to one side.
- A good basic selection of pots and pans, jugs and funnels, bakeware etc. An
 interesting collection of common kitchen utensils, together with a few unusual and
 intriguing ones, such as an ice-cream scoop.
- Plenty of bowls and containers, again a range of the common ones and a few special ones such as jelly moulds or ice-cube trays.
- Supplies of natural materials in small containers and/or jars (lids that stay attached are ideal as they do not get lost).
- Plants for picking, mixing and grinding.
- Enhancements for suitable occasions, such as a selection of food colourings, essences, herbs and spices, chalk for grinding and mixing, and 'special'ingredients to add the final magical touches to potions and spells.
- A big washing up bowl, especially one sunk into the worktop, is very helpful as part of the play and for washing up afterwards.



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Places to Find what you need

The best mud kitchens, and those which have the most atmosphere and character, are made from found, gathered and donated items – especially when these come from the children's own families. It's important not to spend much money – what matters to children is that these things come from the real human world, to combine with the stuff of the real physical world.

Here are a few possibilities:

- Families of children and staff specific requests and lucky finds; items used in a range of represented cultures; the perfect little old cupboard might come from someone's garage
- Charity and second-hand shops especially for interesting tableware, bakeware and utensils
- Emporia and house clearance sales can yield some really interesting and unusual things
- Furniture recycling centres, such as REMAR can yield some quirky and cheap cupboards and dressers Specialist suppliers, such as Muddy Faces – for a range of really interesting and unusual resources to set up and extend mud kitchens.

Get Busy In It!

The mud kitchen context and materials result in young children engaging in an incredible variety of actions, such as:

- filling, pouring, emptying, transferring, mixing, stirring, whisking, frothing, scooping, ladling, handling, moulding, patting, smoothing, mark- making, throwing, splatting, splashing, sharing out, serving, foraging, selecting, picking, collecting,
- gathering, garnishing, shredding, crushing, mashing, grinding, measuring, adding, brewing, boiling, sieving, filtering, separating, pipetting and decanting!

The perfect stimulus of experiencing and exploring the physical transformations (doing) taking place puts the brain into the perfect place for creating mental transformations (imagination) – and the mix easily becomes coffee with sugar, a birthday cake, soups and stews, ice cream in many flavours, lotions and 'make-up', magical drinks and potions, wizard's spells and perfumes... This work is filled with emotional, personal and social value, and offers the context for learning a wonderful range of new and interesting vocabulary and verbal language exchange and expression.



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Being a Good Assistant

The main role adults need to take is of facilitator and enabler – making the kitchen available (best constructed by helping the children to create it to their own specifications), and supporting the play that then emerges from the children.

Good adult support consists of observing (noticing what is really taking place), striving to understand (recognising the significance of this for this child and this group of children) and then responding according to careful consideration as to what would help the child the most (which might be standing back out of the way!).

Supplying useful language for equipment, actions and descriptions can be very helpful provided it is done in context where it makes sense (and is not overdone!).

There is so much to mud kitchen play and its deeper meanings for children that the role of researcher would be highly valuable.

Other adults may not understand why this is all so valuable and important, and may have many objections, so supporting adults also need to interpret what is really happening and advocate for mud play in all children's lives.

Delving into the Meanings of Mud Play

Young children are endlessly interested in – and biologically programmed to explore – the stuff of the earth, how materials behave and what they do.

Making connections through discovering and investigating cause and effect is the stuff of brain development and scientific process. Curiosity, fascination and the pleasure of finding thing out are fundamentally important to the human state – being human.

An even more powerful level of experience for the explorer is that they are the one making things happen – giving feelings of control and power, and over time, building a child who has a strong inner sense of agency (which itself is key to well-being and mental health).

The processes of making 'concoctions' brings the worlds of science and art completely together through possibility thinking.

The growth of imagination and creativity happens through building on concrete cause-and-effect experience to posing and predicting 'what if...?'

Good scientists do this all the time, as do artists and all other innovators.



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Even better, the experience of making concoctions brings the child into the realms of magic and fantasy - reminding us of the ancient fascinations of alchemy.

Keeping it Safe and Healthy

First and foremost, children must be kept safe enough whilst they have access to the

important experiences that they need for full and healthy development. Our job is to manage an opportunity to make it safely available – not to remove it in the name of 'health and safety'. The requirement is to be 'as safe as necessary' rather than 'as safe as possible' (Royal Society for the Prevention of Accidents).

The current official approach is one of risk-benefit assessment – better thought of as benefit-risk assessment: that is, consider why the experience matters and then manage to make it available. Much more can be found in the government endorsed document Managing Risk in Play Provision, available to download from the Play England website.

Contact with soil is actually beneficial as the bacteria in it help to build healthily functioning immune systems in young children (See Why Dirt is Good in booklist under 'Further information'), and research also suggests that this contact produces serotonin in the body – which makes us feel happy!

The medically-supported Hygiene Hypothesis suggests that contact with the beneficial germs that we have evolved with is vital, and that harm is done by over sanitising children as we currently do. Soil can however carry harmful pathogens, and care to ensure no contamination from cat and dog faeces is very important. A useful approach for mud kitchens is to supply soil from purchased loam topsoil rather than from gardens or uncovered plant borders (all garden centres sell this; don't try compost as it does not behave sufficiently like soil for satisfactory mud play). Freshly excavated mole hills also supply lovely clean topsoil! Sand in sandpits is also best covered with a light mesh out of hours (for more on this, see Playing and Learning Outdoors in booklist under 'Further information').

Handwashing is important after playing in this way, so routines and expectations must be agreed with the children, set up to work easily and adhered to, to embed hand-washing as habitual. The best first stage to this is to establish the routine that children wash up the pots they have used in a large bowl of warm, soapy water!

Children also need to stay warm and comfortable – and mud kitchen work is likely to be wet and messy. Waterproof dungarees with wellies offer the best protection for most of the year in the UK – the best hot weather attire would be old shorts and T-shirt! Somewhere to



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wash muddy suits down and hang to dry should be part of any well- operating outdoor provision.

The best risk management processes involve the children as a core control measure – always introduce new resources and experiences carefully, simply and slowly (one at a time, with plenty of time in between) with lots of emphasis on helping children access them safely and effectively. Less is always more with young children's experiences!

Ask the children to look for things they think could be harmful and get their agreement as to the best ways they can manage these (with your support when needed), such as pots on the ground being a tripping hazard.

Pots and utensils need to be kept in good condition and will need to be washed and dried reasonably often to avoid them rusting and becoming unpleasant to use. Keeping them drained and aerated is a very good idea, and occasionally wiping a light coat of cooking oil (with paper towels or cloths) prevents rust and mould. Storing resources in open-net sacks or wire baskets is also a solution.



UNIT 5

FS PROGRAMME: THE WOODLAND ENVIRONMENT



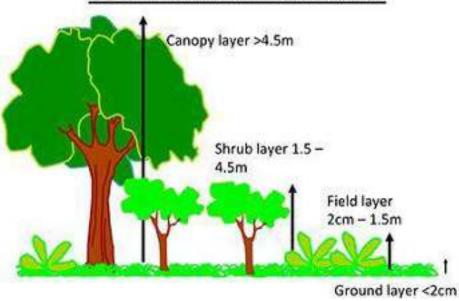


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UNIT 5: FOREST SCHOOL PROGRAMME - THE WOODLAND ENVIRONMENT HANDOUT 1: WHAT A WOODLAND ENVIRONMENT LOOKS LIKE

VERTICAL STRUCTURE

Structure of a Woodland.



HORIZONTAL STRUCTURE

Wild Woodland	Managed Woodlands		
Wild Stand	Evenly Spaced	Evenly Spaced with openings	Unevenly with opening



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UNIT 5: FOREST SCHOOL PROGRAMME - THE WOODLAND ENVIRONMENT HANDOUT 2: DEFINITIONS OF KEY ECOLOGICAL TERMS

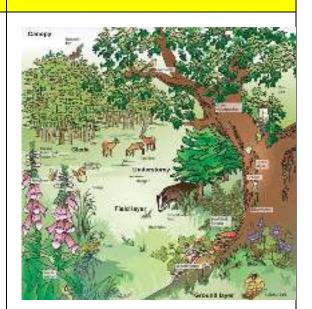
Vertical Most woods ha Structure vegetation lave

& Layers

WOODLAND STRUCTURE

Most woods have a number of vegetation layers.

- There is the canopy, or top layer, where the tallest trees are found, such as oak, ash, beech or birch. These trees receive the maximum amount of light available
- The understorey is composed of shorter trees or shrubs, such as field maple, hawthorn or hazel, which are adapted to grow successfully with less light, as well as saplings of canopy tree species.
- The herb or field layer may include ferns, flowering plants and grasses.
- The ground layer is composed of mosses, lichens, ivy and fungi. On the woodland floor there is usually a layer of rotting leaves and vegetation, which is home to a range of invertebrates.



Source: Open University

Horizontal Structure

The horizontal woodland structure refers to the differences found at different points of a woodland. These differences

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can be caused by a number of factors including rides, banks, hedges, edges, glades & water, aspect (geography) and topography.

- Generally you find a wider variety of plants towards the outer edge of a woodland where the canopy is less dense.
- The plants you find towards the edge will likely be younger or have a shorter life cycle.
- As you move deeper into the woodland you find the number of different species decreases but the age and height of the plants and trees increase.



Biodiversity (source: The Woodland Trust)

Biological diversity, or biodiversity, is defined as 'the number, variety and variability of living organisms'.

Biodiversity is considered at three levels:

- genetic diversity,
- species diversity,
- community diversity.

Each of these types of diversity are essential for life on earth.

1. Genetic diversity

Each individual within a population usually has slightly different forms of the genes that give them their unique traits. You have probably heard the term 'gene pool', which is the total array of genes within a population.



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Genetic diversity is necessary for any species to maintain reproductive viability, resistance to disease, and the ability to adapt to changing conditions. Those individuals that are better able to survive and reproduce pass on these favourable genes. This is known as natural selection.

2. Species diversity

Species diversity is a measure of the number of different species and their relative abundance in an ecological community. The identification and classification of species is known as taxonomy. Each species has its role in the ecosystem, be as predator, prey, pollinator or seed disperser, amongst many others. If one species goes extinct, there are repercussions throughout the whole ecosystem. For example, if bees went extinct, fruits and vegetables could be next, and then the animals that feed off them.

3. Community diversity

This is the number of different species assemblages within a particular area. For example at the coast you may have the beach and sand dunes, then further inland heath and woodland. Each of these has its characteristic vegetation and different animals associated with it.

Community diversity supports the continuity of proper ecosystem functioning, which provides crucial services to people. These include clean water for drinking and agriculture, flood control, protection from soil erosion, filtering of air, climate stability, pollution absorption, medicinal resources, and more.

Biotic & abiotic factors (source: Sciencing.com)

An ecosystem is composed of two main components: biotic and abiotic factors:

- Biotic factors are the living parts of the ecosystem, such as plants, animals, insects, fungi and bacteria.
- Abiotic factors are the non-living parts of the ecosystem, which influence the size and composition of the living parts: these are components like minerals, light, heat, rocks and water.

Biotic factors

The most obvious features of any forest ecosystem are its trees, the dominant biotic feature. They dominate the ecosystem: both in terms of visibility and in terms of biomass. However, they are only one type of organism living in a forest. Other biotic factors include



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shrubs, flowering plants, ferns, mosses, lichens, fungi, mammals, birds, reptiles, insects, worms and microbes.

Ecologists frequently group an ecosystem's factors by what role they play in the system, rather than by what particular species they are. This is known as functional classification.

These functions relate to the movement of energy through an ecosystem, and trees — along with other photosynthetic plants — are the chief primary producers. This means that trees convert the sun's energy into food energy, which is then used by other members of the ecosystem.

These other members of the ecosystem can also be categorized. Primary consumers are, for example, herbivores that eat the primary producers. Secondary consumers are the carnivores and omnivores that eat the primary producers. Decomposers are the scavengers, microbes and fungi that consume the droppings and the carcasses of other organisms.

Abiotic factors

The most important abiotic feature of a forest ecosystem may not be obvious, despite its ubiquity and importance: sunlight. Tangible abiotic factors include soil, minerals, rocks and water. But abiotic factors can be intangible, such as temperature, other types of radiation and the chemistry of soil and water.

The abiotic factors of a forest fall less obviously into functional classifications, but keep in mind that the energy transferred among the various biotic categories is itself a foundational abiotic element. This energy occurs in the form of solar radiation, which includes both visible light and heat (infrared).

Primary producers (plants like trees and shrubs) convert the light into carbohydrates, a form of energy that can be consumed by other organisms. The function of other abiotic factors relies on the minerals they contain, such as the nitrogen in the soil or the hydrogen in water molecules.

Natural / Ecological succession

Ecological succession is the gradual process by which ecosystems change and develop over time. Nothing remains the same and



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(source: Countryside Info)

habitats are constantly changing. There are two main types of succession, primary and secondary:

- Primary succession is the series of community changes which occur on an entirely new habitat which has never been colonized before. For example, a newly quarried rock face or sand dunes.
- Secondary succession is the series of community changes which take place on a previously colonized, but disturbed or damaged habitat. For example, after felling trees in a woodland, land clearance or a fire.

Ecosystems (source: Royal Geographic Society)

A forest ecosystem is the basic ecologic unit in a particular forest that exists as "home" for a community of both native and introduced classified organisms. A forest ecosystem is named for the primary tree species that form the canopy. It is defined by all the collective living inhabitants of that forest ecosystem that co-exist together in symbiosis to create a unique ecology.

In other words, a forest ecosystem is typically associated with land masses covered in trees and those trees are often classified by foresters into forest cover types.

A forest ecosystem community is directly related to species diversity. Generally, you can assume that the more complex the structure, the greater is its species diversity. You should remember that a forest community is much more than just the sum of its trees. A forest is a system that supports interacting units including trees, soil, insects, animals, and man.

Habitats (sources: European Nature Information System; Woodland Trust)

A habitat is a place where plants or animals normally live, characterized primarily by its physical features (topography, plant or animal physiognomy, soil characteristics, climate, water quality etc.) and secondarily by the species of plants and animals that live there.

A habitat can be a salt marsh, a meadow or a pine forest, but a habitat can also be recognised at the landscape level of a tundra type or a deep-sea mud covering several hundreds of square kilometres. At the other extreme, it may be a microhabitat of less



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than 1 m², for example decaying wood, or animal dung in grassland environments.

Habitats change over time. Changes can be slow or rapid, natural or human induced. Some human activities can be catastrophic or provoke major changes to certain habitats, which may lead to their collapse, while other activities can recreate habitats, as has happened in the many biodiversity rich semi-natural habitats of Europe. Some habitats are rich in terms of number of species or may host threatened species, some are connected with cultural or historical values and some are appreciated for their high aesthetic value.

A woodland is a habitat where trees are the dominant plant form. The individual tree canopies generally overlap and interlink, often forming a more or less continuous canopy which shades the ground to varying degrees.

Standing dead wood

The value of dead wood

(source: Trees for Life)

Dead wood (coarse woody debris or CWD) is extremely important to the health of the forest, and this is being increasingly recognised by conservationists. Not only is it an aspect of the process of nutrient cycling, providing a steady, slow-release source of nitrogen, but it is also thought to play a significant role in carbon storage. Fallen logs can also increase soil stability within a woodland.

Microhabitats

Standing dead trees (snags) and fallen debris provide a fantastic array of 'microhabitats'. There is a breathtaking range of saproxylic (deadwood-dependent) organisms including fungi, lichens, invertebrates, mosses and birds, many of them having very specific requirements, and some specialising exclusively on one particular microhabitat. A remarkable 40% of woodland wildlife is dependent on this aspect of the forest ecosystem.

Lifecycles (source: The

Woodland Trust)

Phase one: germination

Life starts small for plants, with most species having humble beginnings as a seed - the seeds of some flowers, such as foxglove, are no bigger than a grain of salt! A seed contains a tiny plant, which will start to emerge once the conditions are right - a process that is



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called germination. To be able to grow, most seeds need to be covered with soil, have access to water and a warm temperature. This is why the majority of flowers and plants start to grow in spring, as winter is too cold for germination.

Phase two: shoots and roots

Germination ends when the plant emerges from the soil and appears above ground. No longer a seed, it is now called a shoot. Once the shoot is exposed to sunlight, leaves will begin to grow and it is able to start producing its own food through photosynthesis. As well as growing up, the plant will have been growing down; roots develop and delve deep into the soil, absorbing the water and minerals needed for growth.

Phase three: flowering

Once the shoot and roots are established, the plant will begin to flower. This is a key part of the life cycle, as it allows the plant to reproduce by making seeds of its own. The snowdrop is one of the first plants to flower in the UK, providing a sign that winter is coming to an end and spring is on its way.

Once grown, flowers produce pollen. To develop seeds, this pollen must then be transferred to another plant of the same species. This is achieved with a little help either from the wind or insects like bees and butterflies. Plants that rely on insects, such as bluebells and primroses, attract the creatures by producing bright and colourful flowers. The pollen is then transported as the insects fly from plant to plant. Those that transfer pollen through the wind, like grasses, have much smaller flowers that are harder to see. It's not just insects that are attracted to flowers, however. The sight of a woodland with wild flowers in full bloom is one of nature's greatest spectacles and has been drawing people to the woods for centuries.

Phase four: fruiting

Once pollinated, the plant is able to produce seeds. But how do they make it into the soil where they can start to grow? The answer is fruit. Fruit develops around the seed, protecting it and helping it to reach the ground. For example, bramble produces blackberries, tasty fruit that is eaten by a variety of animals. When these animals go the toilet, the seeds come out in their poo and some will find their way into the soil, where they can germinate when the time is right. Other plants produce fruit that is transported by attaching



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itself to passing animals, while some rely on wind and water to carry their seeds.

Phase five: death

The life cycle of a plant is very different to our own and they do not die of old age in the same way humans do. Some, known as annuals, will complete their cycle within one year and then die, while a biennial will take two years to go through its life cycle. Other plants, called perennials, can repeat their life cycle over many years, with some, such as trees, potentially living for over a thousand years.

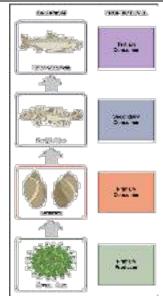
A food chain is a linear sequence of organisms through which nutrients and energy pass as one organism eats another. Let's look at the parts of a typical food chain, starting from the bottom—the producers—and moving upward.

- At the base of the food chain lie the primary producers. The primary producers are autotrophs and are most often photosynthetic organisms such as plants, algae, or cyanobacteria.
- The organisms that eat the primary producers are called **primary consumers**. Primary consumers are usually **herbivores**, plant-eaters, though they may be algae eaters or bacteria eaters.
- The organisms that eat the primary consumers are called secondary consumers. Secondary consumers are generally meat-eaters—carnivores.
- The organisms that eat the secondary consumers are called **tertiary consumers**. These are carnivore-eating carnivores, like eagles or big fish.
- Some food chains have additional levels, such as quaternary consumers—carnivores that eat tertiary consumers.
 Organisms at the very top of a food chain are called apex consumers.

Food chains / webs



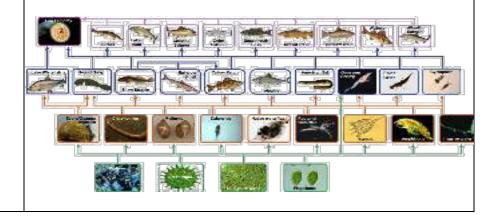
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Food webs

Food chains give us a clear-cut picture of who eats whom. However, some problems come up when we try and use them to describe whole ecological communities. For instance, an organism can sometimes eat multiple types of prey or be eaten by multiple predators, including ones at different trophic levels. This is what happens when you eat a hamburger patty! The cow is a primary consumer, and the lettuce leaf on the patty is a primary producer.

To represent these relationships more accurately, we can use a *food web*, a graph that shows all the trophic—eating-related—interactions between various species in an ecosystem. The diagram below shows an example of a food web from Lake Ontario. Primary producers are marked in green, primary consumers in orange, secondary consumers in blue, and tertiary consumers in purple.





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Photosynthesis is the process by which plants, some bacteria and some protistans use the energy from sunlight to produce glucose from carbon dioxide and water. This glucose can be converted into pyruvate which releases adenosine triphosphate (ATP) by cellular respiration. Oxygen is also formed.

Photosynthesis may be summarised by the word equation:

carbon dioxide + water	sunlight	alucaca + avvaan
	chlorophyll	glucose + oxygen

The conversion of usable sunlight energy into chemical energy is associated with the action of the green pigment chlorophyll.

Plants are the only photosynthetic organisms to have leaves (and not all plants have leaves). A leaf may be viewed as a solar collector crammed full of photosynthetic cells.

Photosynthesis (source: Royal Society of Chemistry)

The raw materials of photosynthesis, water and carbon dioxide, enter the cells of the leaf, and the products of photosynthesis, sugar and oxygen, leave the leaf. Water enters the root and is transported up to the leaves through specialized plant cells known as xylem vessels. Land plants must guard against drying out and so have evolved specialized structures known as **stomata** to allow gas to enter and leave the leaf. Carbon dioxide cannot pass through the protective waxy layer covering the leaf (**cuticle**), but it can enter the leaf through the **stoma** (the singular of stomata), flanked by two guard cells. Likewise, oxygen

produced during photosynthesis can only pass out of the leaf through the opened stomata. Unfortunately for the plant, while these gases are moving between the inside and outside of the leaf, a great deal of water is also lost. Cottonwood trees, for example, will lose 100 gallons (about 450 dm³) of water per hour during hot desert days.

Wildlife corridors

A wildlife corridor is a link of wildlife habitat, generally native vegetation, which joins two or more larger areas of similar wildlife habitat. Corridors are critical for the maintenance of ecological processes including allowing for the movement of animals and the continuation of viable populations.



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UNIT 5: FOREST SCHOOL PROGRAMME - THE WOODLAND ENVIRONMENT HANDOUT 3: BROADLEAF & CONIFEROUS WOODLANDS - HISTORY AND CHARACTERISTICS

As part of your Forest School portfolio you'll need to explain the main differences between broadleaf and coniferous woodlands. As part of your Forest School site survey, it may be useful for you to identify the species of tree and state whether they are broadleaf or coniferous.

BROADLEAF WOODLAND

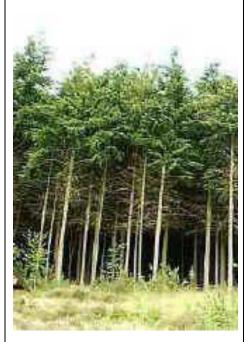


Broad leaf refers to trees with leaves that are flat and wide and not needle like. Broadleaf woodlands are those that are made up predominantly of trees with leaves which, whilst they vary in size and shape, are not needle like. Broadleaf woodlands are traditional British woodlands even though there are now few left. Most tree species found in broadleaf woodlands are native to Britain. The most common are Oak (Sessile and Pedunculate) and Birch (Silver and Downy) but Ash, Sycamore and Beech are also widespread. Most trees in broadleaf woods are deciduous though some, such as Holly, are evergreen. As most trees lose their leaves every autumn the appearance of the woodland changes drastically depending on the season. As the leaves and other leaf litter decompose nutrients are released into the soil. The fallen leaves also provide nesting materials for birds and animals and hiding places for insects. As the canopy is bare for several months greater light levels will reach the ground before the trees regrow their leaves. This gives species in the other woodland layers a greater chance to grow, flower and seed. As well as providing habitats for hundreds and thousands of species of plant, animal and insect broadleaf woodlands play a crucial role is soaking up some of the regular large downpours we get in this country and their presence can prevent or limit damage caused by flooding.



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CONIFEROUS WOODLAND



Conifers are trees with scale like leaves or needles. Coniferous woodlands are made up mainly of trees with needle-like leaves. Most species of conifer are evergreen so the appearance of a coniferous woodland does not change through the seasons as much as a broad leaf woodland.

As well as being identified by their distinctive leaves or needles, conifers have a distinctive profile as most conifer trees tend to grow up instead of out. The only conifers recognised as being native to Britain are Yew, Juniper and Scots Pine. Many coniferous woodlands are now dominated by non-native species such as Douglas Fir and Sitka Spruce. Many coniferous woodlands are planted for timber production and competing species are removed. This results in the woodland having little variety of tree species. Whilst most broad lead woodlands are characterised by the species of trees present most coniferous woodland are characterised by the density of the tree planting and the topography of the land.

FURTHER READING

Broad leaf woodlands

There are over 50 different types of broadleaf woodlands in the UK. If you'd like to learn more about broadleaf woodlands, the Countryside Info website has useful information: http://www.countrysideinfo.co.uk/woodland manage/broadleaf.htm

Coniferous woodlands

Coniferous woodlands in Britain are mostly planted woodlands (plantations). The vast majority are made up of introduced conifer species.

http://www.countrysideinfo.co.uk/woodland_manage/conifer.htm



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COMPARING BROADLEAVED AND CONIFEROUS WOODLANDS

LAYER	CHARACTERISTICS	BROADLEAVED WOODLAND	CONIFEROUS PLANTATION
CANOPY	Species		
	Average no of trees		
	Age range		
	Average distance between trees		
SHRUB	Tree seedling presence		
	Species		
HERB	Species		
GROUN D	Frequency spare ground %		
	Average number of species 0.5m		
	Description of litter		
SOIL	Depth of soil		
	Texture		
	ph		
	Invertebrates found during soil study		

To complete your woodland study use the search tool on the Woodland Trust website to locate woodlands to visit

https://www.woodlandtrust.org.uk/visiting-woods/map/



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UNIT 5: FOREST SCHOOL PROGRAMME - THE WOODLAND ENVIRONMENT HANDOUT 4: TYPES OF TIMBER AND THEIR USE

Deciduous trees are classified as hardwoods and coniferous trees are softwoods.

Alder



The tree thrives in cool, damp areas.

Dye made from the leaves was used as clothes dye.

Its a soft, porous wood and can be used for boat building, sluice gates, veneers, plywood.

Ash



One of the toughest hard woods. Good for making tools and sport handles e.g. hammers, axes, spades, hockey sticks. Good for firewood and making charcoal

Beech



Used as a fuel and good for making furniture, cooking utensils and tool handles.



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Downy Birch



Tough and heavy wood suitable for furniture making, handles and toys. The bark is used for tanning leather.

Silver Birch



Tough and heavy wood suitable for furniture making, handles and toys.

Hazel



Hazel is coppiced frequently as a way of managing woodland habitats. The wod is used for making pea sticks and bean goles for gardening.



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Holly



The whitest of all woods. Its heavy, hard and fine grained. It can be stained and polished and used for furniture and engraving. It's good for making walking sticks and good for firewood.

Field Maple



The hardest and highest density of timber. It can be used for wood-turning, carving, musical instruments in particular harps.

English/Pedunculate Oak



Acorns grow on stalks and be used for making flour. It is the hardest, most durable timber. Used historically for ship building until the mid 19th century. Used for making architectural beams, flooring, wine barrels and firewood. Tannin in the bark used for dying leather.



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Sessile Oak



Stalkless acorns. It is the hardest, most durable timber. Used historically for ship building until the mid 19th century. Used for making architectural beams, flooring, wine barrels and firewood. Tannin in the bark used for dying leather.

Scots Pine



The strongest of softwoods used for construction and joinery, telegraph poles, gateposts and fencing. The resin makes turpentine, the inner bark can make rope, the roots can make tar and the cones can make dye and kindling if dry.

Sycamore



A hard and strong wood used for making furniture and kitchenware as the wood doesn't taint or stain the wood.



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Wood for campfires

Oak, ash and beech are best for cooking as they produce heat and create a long burn. Fruit woods are also good burners and positively affect the flavour of the food. Softwoods e.g. spruce and pine will burn faster and at times may be too hot.

Toxic woods

Tannic woods e.g. oak are not suitable for carving spoons and other utensils as the wood is toxic. Trees that can be used for carving utensils are alder, apple, ash, beech, birch, blackthorn, cherry, elm, field maple, hawthorn, holly, plum, quince, sycamore and willow. See http://www.spooncarving.org.uk for more details



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UNIT 5: FOREST SCHOOL PROGRAMME - THE WOODLAND ENVIRONMENT HANDOUT 5: PRINCIPLES OF SUSTAINABLE WOODLAND MANAGEMENT

Coppicing





Coppicing or cutting down a tree to produce new growth has been a way of harvesting wood for thousands of years. Far from being destructive, coppicing has been the reason why many woodlands have survived, because the woodland had an economic value. Coppicing rejuvenates the tree, so some coppice stumps or 'stools' are hundreds of years old and are an important genetic link back to the ancient woodlands. In the past, the rural economy was based on coppicing and coppice products were used for building, fencing, fuel, furniture and many other uses. Coppicing requires only simple hand tools and produces material which can be manually handled.



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Depending on the size, age, and condition of the coppice stems, you can use a billhook, bow saw or axe. Loppers and a pruning saw may also be useful. Trained and competent operators can use a chainsaw. Billhooks are neatest and fastest on hazel or other young regrowth up to about 75mm (3") diameter, but on older coppice, saws are normally best. The 530mm (21") bowsaw is useful on multiple-stemmed trees, provided the stems are not too large.

When the tree is cut down, new shoots arise from dormant buds on the side of the stump, or from adventitious shoots around the edge of the cut surface. Root buds which are close to the stump can also produce coppice shoots, especially in hazel and birch. The buds are stimulated into growth by plant hormone levels produced when the previous top growth is removed.

Most native broadleaved species coppice, but some are stronger than others. The species which produce the strongest growth over the longest time are ash, hazel, oak, sweet chestnut, field maple and small-leaved lime. Birch and black polar only produce regrowth if cut young when the stump is fairly small. The native wild cherry, aspen and elm, and the non-native white poplar and grey alder produce suckers from the roots, rather than growing from the stump. Conifers die if cut to the stump.

Pollarding



Pollarding of wood-pasture, farm, waterside and woodbank trees should be started when the trees are fairly young, before major branches have grown thick and heavy. It is



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repeated at five-to twenty- year intervals, in the same way as coppicing, depending on the size of poles required.

Such trees can reach immense age and girth, and pollard management should be maintained even when the poles are no longer needed, to keep the crowns from collapsing under their own weight, and to prolong the life of the tree.

Pollarding involves working from a height and should only be done by a trained and competent person.

Extracts from "Woodlands, a practical handbook" by Elizabeth Agate and published by The Conservation Volunteers (TCV) https://www.tcv.org.uk

For more information about Woodland management techniques Read Chapter 8 of the book.



PORTFOLIO DEVELOPMENT GUIDANCE



T E WIVE

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LEVEL 3 PORTFOLIO ASSESSMENT CRITERIA & GUIDANCE

This document provides guidance on the structure and content required for the Forest School Level 3 Portfolio at The Hive. It also gives an overview of the assessment criteria used for the Portfolio submission.

A Little Housekeeping Before Submission

- 1. Make sure to add your name and submission date on the front cover of your portfolio
- 2. You need to add the following plagiarism statement to the inside front cover of your portfolio: "I confirm that this portfolio was written by me and in my own words, except for quotations from published and unpublished sources which are clearly indicated and acknowledged as such. I am conscious that the incorporation of material from other works or a paraphrase of such material without acknowledgement will be treated as plagiarism, subject to the custom and usage of the subject, according to the OCNWM Regulations on Conduct of Examinations. The source of any picture, map or other illustration is also indicated, as is the source, published or unpublished, of any material not resulting from my own experimentation, observation or specimen-collecting."
- 3. You need to include a copy of your Outdoor or Forest School First Aid Certificate

Reminder of Qualification Learning Hours

Total qualification time: 180 hours (23 days)

Key timings are broken down as follows:

- 1. Training week: 40 hours (5 days)
- 2. Forest School sessions (6 x 2 hours + planning): 32 hours (4 days)
- 3. Assessment days: 32 hours (4 days)
- 4. Portfolio development: 76 hours (10 days)



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Reminder of Training Milestones

Have you completed everything?

Stage 1	Attend Face-to-face training week		Χ
Stage 2	 Practice practical skills Start work on Portfolio Attend First Aid training course Plan, deliver and evaluate 6 FS sessions Arrange FS session observation with assessor 	You have up to 9 months to do this after the training week	
Stage 3	 Return to attend assessment days 	You must return for your assessment days no later than 9 months after the training week	
Stage 4	 Complete portfolio Continue to practice practical skills 	You have up to 3 months to complete your portfolio after your assessment days. You must submit it no later than 12 months from the training week if you started your training on 1st January 2019, your portfolio must be submitted by 31st December 2019 or you will have to restart the process.	

Are You Ready For Your Portfolio Assessment?

Please use the checklist below to make sure you have included all the content required in your portfolio.

Your portfolio needs to include 5 CHAPTERS, which correspond to the 5 units. Each CHAPTER will have several SECTIONS.

The specific content needed in each chapter is listed below.

Feel free to use as many photos, videos and drawings as you like. Your portfolio can be very visual or it can be mostly written. You are free to choose the format that works best for you.



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You can also use as much or as little technology as you like. Some students choose to build their own website, others prefer to do everything by hand in a scrapbook format. Both are completely acceptable, as long as you cover the content listed below.

CHAPTER / UNIT 1	FOREST SCHOOL PROGRAMME DELIVERY
Section 1	Delivery of six initial Forest School sessions
Section 2	Observation of 3 participants in more detail
Section 3	Evaluation of six initial Forest School sessions

CHAPTER / UNIT 2	FOREST SCHOOL PROGRAMME LEARNING & DEVELOPMENT
Section 1	Summary of Forest School principles applied to own programme
Section 2	Forest School and physical development and well-being of learners
Section 3	Forest School and emotional & social development of learners
Section 4	Forest School and intellectual development of learners
Section 5	Key characteristics of play and its role at Forest School
Section 6	Theories of learning and development relating to Forest School
Section 7	Influences affecting participant behaviour at Forest School
Section 8	Developing a community of learning
Section 9	Your own personal development & learning journey

CHAPTER / UNIT 3	FOREST SCHOOL PROGRAMME PLANNING & PREPARATION
Section 1	The history of Forest School
Section 2	Local Forest School practitioners and networks
Section 3	Forest School research evaluation
Section 4	Site survey
Section 5	Three-year site management plan
Section 6	The Forest School Handbook
Section 7	The role of the Forest School Leader
Section 8	The rationale for your own Forest School programme
Section 9	Detailed session plan for your first Forest School Session

CHAPTER / UNIT 4	FOREST SCHOOL PROGRAMME: PRACTICAL SKILLS
Section 1	Appropriate protective equipment (PPE) and clothing
Section 2	Checking, cleaning, maintaining and storing tools, ropes and cords
Section 3	Safely using hand tools for a range of applications
Section 4	Tying and using a range of knots
Section 5	Safely making a range of craft items using woodland materials
Section 6	Erecting group shelters
Section 7	Safely siting, building, lighting and managing a campfire
Section 8	Cooking on a campfire using a range of methods
Section 9	Extinguishing a fire and leaving the site safe



CHAPTER / UNIT 5	THE WOODLAND ENVIRONMENT
Section 1	Structure & biodiversity of native broadleaf & coniferous woodland ecosystems
Section 2	Flora and fauna identification
Section 3	Woodland management methods and their significance to sustainability
Section 4	Ways to involve participants in sustainable woodland management
Section 5	Benefits of connection with woodland environments on well-being
Section 6	Connection between participants and the woodland environment

CHAPTER / UNIT 1 - FOREST SCHOOL PROGRAMME DELIVERY			
SECTIONS		ASSESSMENT CRITERIA	Х
1.	Document the delivery of your six initial Forest School sessions	 Provide evidence of your planning process Document your delivery through observation Document your ability to demonstrate flexibility and progression from one session to the next Document your ability to reflect participants' interests, motivations and needs 	
2.	Observe 3 participants in more detail by assessing the impact of your Forest School sessions on their learning and development	 Conduct a baseline assessment for each of the 3 participants at the start of your 6 sessions Document evidence of your observations of each participant during each session Evaluate your observations to assess the impact of your sessions on the learning and development of the 3 participants Make recommendations for extending their learning and development in future sessions 	
3.	Document the evaluation of your six initial Forest School sessions	 Individual session evaluation Conduct a baseline assessment of the whole group at the start of your 6 sessions Document evidence from each session to compare what happened compared to your plan 	



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3.	Reflect on each session, including what worked
	well/didn't work well and recommendations to
	inform the next session plan

Summary evaluation at the end of the 6 sessions

- 1. Produce an overall evaluation of the 6 sessions covering:
 - What went well and why
 - What didn't go well and why
 - What you would change and why
- 2. The evaluation should be in relation to:
 - Adult experience
 - o Participant experience
 - o Communication of the ethos of FS
 - Effectiveness of your handbook in supporting delivery
 - o Effectiveness of your session planning
 - Resourcing
 - Site management

HANDOUTS PROVIDED FOR UNIT 1

- 1. Session Plan Template: overview and timetable
- 2. Participant observation and impact measurement form
- 3. FS Leader reflection on practice: key thinking points
- 4. End of training pupil evaluation form
- 5. End of training staff evaluation form

CHAPTER / UNIT 2 - FOREST SCHOOL PROGRAMME LEARNING AND DEVELOPMENT				
SECTIONS	ASSESSMENT CRITERIA	X		
Summarise how the Forest School principles apply to your own programme	Describe the Forest School principles and criteria for good practice, as agreed by the UK Forest School community			



		D. Deserther the shell to the state of	
		Describe the challenges of implementing the principles and criteria with your proposed approach to overcoming them	
2.	Give examples of how Forest School encourages the physical development and well- being of learners	 Use examples from your own 6 Forest School sessions Reference your background reading/relevant research 	
3.	Give examples of how Forest School supports the emotional and social development and well- being of learners	 Use examples from your own 6 Forest School sessions Focus on self-esteem, confidence, emotional intelligence, resilience and spiritual development Reference your background reading/relevant research 	
4.	Give examples of how Forest School supports the intellectual development of learners	 Use examples from your own 6 Forest School sessions Focus on creativity and independent learning Reference your background reading/relevant research 	
5.	Summarise the key characteristics of play and its role at Forest School, giving examples of how play and choice are integrated into your Forest School sessions	 List the widely recognised principles of play Make links to play policy and/or the Forest School Handbook. Show evidence from observations and evaluations drawn from your own practice 	
6.	Summarise the recognised theories of learning and development relating to	 Describe and summarise two learning theories Explain why you chose these theories Explain their relevance to Forest School 	



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	a Forest School Programme	4.	Include examples from your own Forest School sessions	
7.	Summarise the key influences that affect participant behaviour at Forest School	1. 2.	Describe the factors both in Forest School and in the wider lives of participants that can affect their behaviour at Forest School, including social, biological, environmental factors, etc. Explain how an effective approach to behaviour considers how needs (met and unmet) impact on behaviours. Explain how these behaviours then impact on the learning and development of participants at Forest School.	
8.	Describe how meeting participants' needs helps develop a community of learning, giving examples from your own Forest School sessions	1.	Describe the ways in which a learning community has developed during your Forest School journey: During your training During your 6 Forest School sessions 	
9.	Summarise your own personal development & learning journey through FS training process	1. 2.	Describe your personal reflective practice, highlighting different approaches identify your Continuing Professional Development needs.	

HANDOUTS PROVIDED FOR UNIT 2

PLAY & CHILD DEVELOPMENT

- 1. Summary of key developmental stages and milestones (0-18)
- 2. Seven principles of play / Recent innovative play practices / Risky play and facilitating play experiences / Swedish theorist
- 3. Summary of recent development in play policy in the UK
- 4. Summary of Jean Piaget's schemas



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5. Summary of Lev Vygotsky's social development theory

THEORIES & APPROACHES TO LEARNING

- 1. Summary of Gardner's theory of multiple intelligences
- 1. Summary of recent research on the benefits of Outdoor Learning
- 1. Summary of The Mihaly Csikszentmihalyi's Flow Theory
- 1. Summary of Maslow's Hierarchy of Needs
- 1. Summary of Holistic Learning theory

FOREST SCHOOL AND CHILDREN'S WELLBEING

- What is wellbeing?
- 1. The benefits of Forest School to the wellbeing of children

CHAPTER / UNIT 3 - FOREST SCHOOL PROGRAMME PLANNING AND PREPARATION			
SE	CTIONS	ASSESSMENT CRITERIA	X
1.	Summarise the key factors that have influenced the development of Forest School over time	 Describe the history of Forest School Summarise the key influences that have informed the six current Forest School Principles 	
2.	Identify local Forest School practice and networks	 Identify local Forest School practitioners and networks that you could rely on (The FSA website is helpful for this) 	
3.	Evaluate one piece of research on Forest School	 Find one piece of Forest School research (printed or online) Evaluate it against your own opinions and experience: what do you think of the methodology chosen? What are the outcomes for participants? Is this research relevant? 	
4.	Write an ecological impact assessment of	5. Describe the history of the site6. Identify the key stakeholders	



	running a Forest School programme on your own site	 Write the ecological survey (flora, fauna, abiotic elements, including any special features) Describe the type and level of impact you expect from Forest School Describe the key mitigations you will put in place against the above 	
5.	Use the ecological impact assessment to create a 3-year management plan for the sustainable use of your own Forest School site and to enhance biodiversity	summarise: • Your vision for the site	
6.	Create your own Forest School Handbook	 Write your own FS Handbook, which should include the following documents (with reference to appropriate legislation): Contents Declaration of review date Declaration the Handbook has been read by all supporting adults with a regular role Vision statement for own Forest School reflecting the Forest School Ethos and Principles (to include the pedagogy of Forest School and the role of play and choice) Policy statements and procedures:	



7.	Explain the role of the 1	Describe t	he role of the Forest School Leader (this	
		0	Social Media Policy Staff, ratios, roles and responsibilities Policy Visitor Protocol Policy	
		0	Lost or missing child Policy	
		0	Disclosure/accusation Policy	
		0	,	
			Policy	
		0	Data Protection and handling/ ICO	
		O	Policy	
		0	Confidentiality Policy Child/vulnerable adults protection	
		0	Anti-bullying Policy	
		0	Safeguarding Policy	
			toileting, food & drink	
			 Welfare inc clothing, PPE, 	
			Transport	
			 Risk Benefit Analysis 	
			 Risk Assessment 	
			ToolsRisk Management	
			Manual Handling Table	
			 Insurance 	
			First Aid	
			Fire	
			 Extreme Weather 	
			• COSHH	
			 Cooking and Food Hygiene 	
		O	Accident & Emergency	
		0	 Including Prevent if appropr. Health & Safety Policy 	



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8.	Explain the rationale for your own Forest School programme	2.	Describe the rationale for your own Forest School programme Link your description to your participants' learning and development needs			
9.	Produce a detailed plan of your first Forest School session	1.	School S Your pla	Sessi an sh Prac O S O F O P O P O P O P O P O P O O O	ailed session plan for your first Forest ion. nould include: tical information Weather check Site check Staffing Resources (kit, crafts, refreshments and nandbook) Safety & welfare equipment Risk Benefit Assessments for the experiences in that particular session roach and possible Lines of elopment for participants Establishing a safe community of earning Establishing group expectations Opportunities for self-directed learning and play Opportunities for holistic development Opportunities for participant reflection	

HANDOUTS PROVIDED FOR UNIT 3

- 1. The history of Forest School and recent developments
- 2. FSA Health & Safety Guidance Note
- 3. Example ecological impact assessment form (My Forest (Silva Foundation)
- 4. Example 3-year Forest School site management plan
- 5. FS Handbook contents checklist
- 6. Example risk assessment form
- 7. Example risk benefit assessment form



- 8. Example Session 1 of 6 FS sessions
- 9. Example 6-session programme outline

	CHAPTER / UNIT 4 - FOREST SCHOOL PROGRAMME: PRACTICAL SKILLS SECTIONS ASSESSMENT CRITERIA X				
SECTIONS		ASSESSMENT CRITERIA			
1.	Select appropriate protective equipment (PPE) and clothing	 Describe appropriate clothing and PPE for Forest School: Across the 4 seasons Across different activities (fire making, tool use, natural materials collection, shelter building, etc.) In facilitation with client group 			
2.	Check, clean, maintain and store tools, ropes and cords safely	 Describe the basic tool maintenance for 2 tools of your choosing and 1 rope, including: Cleaning, drying and oiling Stropping Changing blades Checking tool condition prior to use Identifying when tools need taken out of circulation Methods of tool maintenance Completion of tool maintenance log Rope/cord maintenance and storage Cleaning and drying Checking rope/cord condition prior to use Identifying when rope/cord need to be taken out of circulation Safe storage Describe the process of facilitating tool and rope maintenance with client group, taking into consideration age & developmental stage, ratios, and competence and confidence of FS Leader in maintaining bladed tools 			



3.	Use different hand tools safely	2.	Describe the step-by-step process of using 2 different hand tools of your choosing safely in the context of Forest School Describe the process of facilitating the use of hand tools with client group, considering the following: FS Ethos and pedagogy Differentiation, age & developmental stage Previous experience of participants Ratios Insurance Appropriate safe techniques Ensuring learners choice of task/tool and the woodland materials are appropriate Safe working areas Safe working distances	
4.	Tie and use a range of knots	2.	Describe the short process needed for the following 4 uses of knots: Joining two ropes together Attaching a rope to an object Tensioning a rope Describe the process of facilitating knots with client group, considering the following: Regard to the FS Ethos and pedagogy Choice of knot and rope/cord for context Differentiation and age appropriate explanations	
5. Make craft items using woodland materials safely		1.	Produce detailed instructions and photographic evidence for making at least 4 craft items using a range of techniques, and with at least 2 items made using woodworking hand tools	



	 Shaped Carved Split Describe the process of facilitating craft making with client group, including: Choice of materials, techniques and tools appropriate to the task in hand, age and stage of the learner FS Ethos and pedagogy
3. Erect group shelter tarp or natural wormaterials	
4. Safely site, build, li and manage a cam suitable for purpos	pfire fire, considering the principles below:



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- 4. Woodland Type
- 5. Soil Type
- 6. Permissions
- 7. Escape routes
- 8. Legislation

3. Managing the surrounding area

- 1. Seating distances away from fire pit
- 2. Minimising ecological impact

4. Building the fire

- 1. Fire pit base and surround
- 2. Fire Lays for different purposes
- 3. Non-toxic types of wood to burn
- 4. Weather

5. Lighting the fire

- Fire lighting using range of methods including fire strikers
- 2. Tinder, kindling and fuels

6. Managing the fire

- 1. Fire triangle
- 2. Size and type of fire
- 3. Management of resources
- Describe the process of facilitating the safe use of fire with client group, considering the following:
 - FS Ethos and pedagogy
 - o Differentiation, age & developmental stage
 - o Previous experience of participants
 - o Ratios
 - Insurance
 - With reference to food hygiene procedures and policy
 - Managing the group
 - Cross reference to communication strategy in relation to specific needs of individuals/client group



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7.	Cook on a campfire
	with regard to food
	hygiene and safety

- Describe the process of cooking with fire, using two different cooking methods of your choice
- Describe the process of facilitating safe camp fire cooking with client group, considering the following:
 - FS Ethos and pedagogy
 - o Differentiation, age & developmental stage
 - o Previous experience of participants
 - o Ratios
 - Insurance
 - With reference to food hygiene procedures and policy
 - Managing the group
 - Cross reference to communication strategy in relation to specific needs of individuals/client group

8. Extinguish a fire and leave the site safe

- 1. Describe the process of extinguishing fires safely:
 - Showing understanding of geography
 - Minimizing ecological impact on soils and woodland ecology
 - Following Leave No Trace principles
 - Cross referencing to management plan and ecological impact assessment
- 2. Describe the process of facilitating safe extinguishing of fires with client group. considering the following:
 - FS Ethos and pedagogy
 - Differentiation, age & developmental stage
 - o Previous experience of participants
 - Ratios
 - Insurance
 - Managing the group



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Cross reference to communication strategy

HANDOUTS PROVIDED FOR UNIT 4

- 1. Tool use: step-by-step scripts for safe use
- 2. Resources for effective tool maintenance and storage
- 3. Fire pit guidance: map and visuals
- 4. Step-by-step fire making process H&S
- 5. Resources for ropes, knots and shelters techniques
- 6. Overview of structure types: tarps and natural dens
- 7. Making a mud kitchen
- 8. Resources for Forest School activity ideas

CHAPTER / UNIT 5 – THE	W	OODLAND ENVIRONMENT	
SECTIONS		ASSESSMENT CRITERIA X	
Compare structure and biodiversity of native broadleaf and coniferous woodland ecosystems.	1.	Identify and describe: Vertical layers: below ground, ground, field, shrub, understorey, canopy Horizontal features: rides, banks, hedges, edges,glades & water, aspect and topography Define the following ecological terms: Biodiversity Abiotic elements e.g soil and water Natural succession Ecosystems Habitats (including standing dead wood) Life cycles Seasonality Food chains/webs The effect of light and photosynthesis Wildlife corridors in relation to ecosystems	



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Explain why flora and fauna identification is important for Forest School leaders

- 1. Write a short explanation, which may include the following:
 - o Identifying protection species
 - Informing woodland management plans
 - Sharing knowledge with participants
 - Following Health & Safety
 - Using plants for firewood, crafts, foraging
 - Showing consideration for sustainability
 - Showing consideration for lifecycles and seasons

Identify woodland flora 1. and fauna for own site

- Create an engaging and accurate Flora and Fauna ID learning resource for your own client group and site
- Produce detailed identifying traits for at least 20 species across a range of flora and fauna, to include:
 - Physical description (colour, size, scent, etc)
 - Habitat
 - Life cycle
 - Ecological niche
 - Relevant health and safety
 - o Uses
 - o Folklore
 - History

Describe woodland management methods and their significance to sustainability

- Describe 3 sustainable woodland management methods to maintain and improve the long-term health of the woodland. Methods can include:
 - Planting
 - Regular timber crops
 - Monitoring species
 - Rotating sites used
 - Managing dead wood
 - Habitat creation e.g boxes and habitat piles
 - Management of invasive species
 - Improving biodiversity
 - Techniques such as: coppicing, pollarding, thinning, managed grazing, scalloping and ride management
 - Woodland products
 - Managing and reporting Biosecurity



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Explain ways to involve participants in sustainable woodland management on a Forest School site	1.	Describe your understanding of the role of Forest School Leaders as stewards of the woodland for future generations, considering participants and management techniques that could be implemented depending on age and ability.
Evaluate research articles on the benefits of connection with woodland environments on wellbeing	1.	Research and summarise 2 articles on the benefits of a connection with woodland and natural environments, referencing physical and emotional well- being and linking to your own FS experiences
Explain how Forest School nurtures connection between participants and the woodland environment	1.	Describe approaches to Forest School delivery that support connection with woodland environments, using examples from your own practice

HANDOUTS PROVIDED FOR UNIT 5

- 1. What a woodland environment looks like: image
- 2. Definitions for key ecological terms
- 3. Broadleaf and coniferous woodlands: history and characteristics
- 4. Types of timber and their use
- 5. Principles of sustainable woodland management
- 6. Signpost to selected fauna and flora ID resources



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LEVEL 2 PORTFOLIO ASSESSMENT CRITERIA & GUIDANCE

This document provides guidance on the structure and content required for the Forest School Level 2 Portfolio at The Hive. It also gives an overview of the assessment criteria used for the Portfolio submission.

A Little Housekeeping Before Submission

- 4. Make sure to add your name and submission date on the front cover of your portfolio
- 5. You need to add the following plagiarism statement to the inside front cover of your portfolio: "I confirm that this portfolio was written by me and in my own words, except for quotations from published and unpublished sources which are clearly indicated and acknowledged as such. I am conscious that the incorporation of material from other works or a paraphrase of such material without acknowledgement will be treated as plagiarism, subject to the custom and usage of the subject, according to the OCNWM Regulations on Conduct of Examinations. The source of any picture, map or other illustration is also indicated, as is the source, published or unpublished, of any material not resulting from my own experimentation, observation or specimen-collecting."

Reminder of Qualification Learning Hours

Total qualification time: 70 hours (9 days)

Key timings are broken down as follows:

5. Training week: 40 hours (5 days)

6. Forest School sessions (3 x 2 hours + planning): 12 hours (1.5 days)

7. Portfolio development: 18 hours (2.5 days)

Reminder of Training Milestones

Have you completed everything?

Stage 1	0	Attend Face-to-face tutor-led training week		Χ
Stage 2	0 0 0	Support the planning delivery and evaluation	You have up to 3 months to do this after the training week	



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Stage 3	 Complete portfolio Continue to practice practical skills 	You have up to 6 months to complete your portfolio after your training days. You must submit it no later than 6 months from the training week
		if you started your training on 1 st January 2019, your portfolio must be submitted by 30 th June 2019 or you will have to restart the process.

Are You Ready For Your Portfolio Assessment?

Please use the checklist below to make sure you have included all the content required in your portfolio.

Your portfolio needs to include 2 CHAPTERS, which correspond to the 2 units. Each CHAPTER will have several SECTIONS.

The specific content needed in each chapter is listed below.

Feel free to use as many photos, videos and drawings as you like. Your portfolio can be very visual or it can be mostly written. You are free to choose the format that works best for you.

You can also use as much or as little technology as you like. Some students choose to build their own website, others prefer to do everything by hand in a scrapbook format. Both are completely acceptable, as long as you cover the content listed below.

CHAPTER / UNIT 1	SUPPORTING A FOREST SCHOOL PROGRAMME: LEARNING AND DEVELOPMENT
Section 1	Forest School ethos, principles and approach to learning and development
Section 2	Forest School experiences supporting learning and development
Section 3	The role of Assistant at a Forest School
Section 4	Reflecting on your own Forest School training

CHAPTER / UNIT 2	FOREST SCHOOL PROGRAMME LEARNING & DEVELOPMENT
Section 1	The structure of woodlands
Section 2	Flora and fauna identification
Section 3	Managing the ecological impact of a Forest School programme
Section 4	The role of risk assessment at Forest School
Section 5	The risk assessment process for a Forest School site
Section 6	Practical skills relevant to a Forest School Programme



CHAPTER / UNIT 1 - SUPPORTING A FS PROGRAMME: LEARNING AND DEVELOPMENT				
SECTIONS	ASSESSMENT CRITERIA	X		
Describe the Forest School ethos, principles and approach to learning and development	Write a short summary explaining the Forest School approach to learning and how it supports holistic development			
Explain how FS experiences can support learning and development	 Summarise the key characteristics of play and its role at Forest School Explain, giving examples, how play and choice are integrated into Forest School programmes Describe how to develop a community of learning by meeting the needs of all participants, giving examples from your own Forest School experiences 			
Explain the role of Assistant at a Forest School in relation to the Forest School ethos, principles and criteria	 Describe the role of the Forest School Assistant mapping to the Forest School ethos and principles, and giving examples from your own Forest School experience Summarise your experience of assisting with the planning and delivery of three consecutive Forest School sessions Summarise your experience of assisting with the evaluation of the three consecutive Forest School sessions, showing how observations and evaluations inform future session plans Use your observations of one participant over three consecutive sessions to assess the impact of Forest School on their learning and development 			
Describe how to reflect on your own Forest School training	Summarise your own development and the learning you gained whilst training to be a Forest School Assistant			



CHAPTER / UNIT 2 - SUPPORTING A FOREST SCHOOL PROGRAMME: PRACTICAL SKILLS				
SECTIONS	ASSESSMENT CRITERIA	Χ		
Describe the structure of woodlands	Describe the structures and biodiversity of native broadleaf and coniferous woodland eco systems			
Identify flora and fauna & understand the importance of identification	 Identify up to 10 woodland flora and fauna for your own site, detailing the characteristics for each species 			
Explain how to manage the ecological impact of a Forest School programme	Describe how you would manage the ecological impact of running a Forest School programme on your own site			
Summarise the role of risk assessment at FS	Define the terms 'hazard' and 'risk' with reference to Forest School			
Describe the risk assessment process for a FS site	Carry out a site risk assessment and a risk- benefit assessment related to one activity at Forest School			
Describe a range of practical skills relevant to a Forest School Programme.	 Summarise the process and safety considerations involved in applying the following practical skills with a FS group: Using appropriate personal protective equipment (PPE) and clothing for FS Checking, cleaning, maintaining and storing tools, ropes and cords at Forest School Using different hand tools for Forest School Using a range of knots selecting ropes/cords for different applications at Forest School Making craft items using woodland materials Erect temporary group shelters using tarpaulin/natural woodland materials Building, lighting and managing a campfire Extinguishing a fire and leaving a site safe 			



ASSESSMENT DAYS

WHAT TO EXPECT





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LEVEL 3 OVERVIEW OF ASSESSMENT DAYS (4 DAYS)

The assessment days are designed to build confidence and help learners get the best out of the training experience by allowing them to demonstrate their competence, both to their peers and to the assessor. It is an integral part of the training process at Level 3 and is mandatory.

**** IMPORTANT ****

You must return for your assessment days within 1 year of completing your initial training week or you may have to re-do your initial training week at an additional charge.

The four days of assessment are structured as follows:

Day 1	• Revision Day: this is an opportunity for you to practice the skills you feel less confident with. You will be able to prioritise your areas of practice.
Day 2	 Assessment Days: the following 3 days of assessment will cover all practical skills and areas of learning across a range of sessions, including:
Day 3	 Forest School session planning Practical skills assessment
Day 4	 Shelters Knots Fire lighting and cooking Tool use Tool scripts and safety procedures Forest School delivery session to your peers about the ethos of Forest Schools. This will be assessed by your tutor as well as your peers Individual feedback session on session planning

During the assessment period you will be required to:

- Present your completed Forest School handbook
- Demonstrate your ability to instruct others in safe use of tools
- Using your completed handbook you will work in groups to plan, coordinate, deliver and evaluate a Forest Schools session delivered to an adult group about the ethos of forest schools.



Edspace Falkirk Street London N1 6HQ 020 3435 6848

Complaints Policy

At The Hive, we aim to work in partnership with learners to deliver a high-quality learning environment for everyone. If for any reason we fall short of this goal, we would like to be informed in order to amend our practices for the future. Our complaints policy will be provided in our learners' handbook.

Records of all complaints will be retained for a period of at least three years. A summary of complaints is available for learners on request.

Tutors are responsible for dealing with complaints in the first instance, in consultation where required with the Internal Verifier. If the complaint is about the Tutor, the Internal Verifier will investigate the matter. Any complaints received will be recorded on a Complaints Log.

Any complaints made will be dealt with in the following manner:

Stage one

Complaints about aspects of the training programme:

• The Tutor will discuss the matter informally with the learner concerned and aim to reach a satisfactory resolution.

Complaints about a Tutor:

- If appropriate, the learner will be encouraged to discuss the matter with the tutor concerned.
- If the learner feels that this is not appropriate, the matter will be discussed with the Internal Verifier, who will then discuss the complaint with the Tutor and try to reach a satisfactory resolution.

Stage two

If it is impossible to reach a satisfactory resolution to the complaint through informal discussion, the learner should put their complaint in writing to the Internal Verifier, who will:

- Acknowledge receipt of the letter within 7 days.
- Investigate the matter and notify the complainant of the outcome within 28 days.
- Send a full response in writing, to all relevant parties, including details of any recommended changes to be made to The Hive's practices or policies as a result of the complaint.
- Meet relevant parties to discuss The Hive's response to the complaint, together or on an individual basis.