

Introduction

Cynefin Outdoor Activity Centre Project

Overview:

Exposure to outdoor learning

An Outdoor activity centre, for children aged 12-16 for Health and Wellbeing.

Encourage and develop Physical Literacy, (Physical competence, confidence, etc).

Therapeutic mental/anxiety enhancement, (critical thinking)

Team Work and social engagement skills, (creativity, organising).

Consistency to enhance **Progression**

Reasons why this centre is needed

Through research, Hillman et al. (1990) found that between 1971-1990 there was a 50% decrease in children being allowed outside on their own. More recently, **Unilever (2016) surveyed more than 12,000 parents of 5-12 year olds in 10 countries around the world. They found that in the U.K. almost a third of children spend less than thirty minutes outside each day, and one in five children on an average day, do not go outside at all.**

Possible reasons for children not going outside can be attributed to parents' fears about safety. A MORI poll (McNeish and Roberts 1995) conducted by Barnardos found that although **91% of the adults questioned realised the importance of outdoor play, 60% of those polled expressed fears for their children's safety outside.** Through research Valentine and McKendrick (1997) conclude that parental fears and the changing nature of childhood appear to play a more critical role in limiting, or determining children's play opportunities.

“The best classroom and the richest cupboard is roofed only by the sky” McMillan 1925. Margaret McMillan realised the potential of outdoor learning over one hundred years ago. The above statement sums up the perspective of one of the pioneers of nursery education.

In her book ‘The Nursery School’ (1919), McMillan describes the development and organisation of her setting in great detail, paying particular attention to **the importance of children being outdoors for health and wellbeing. “To feel one’s life in every limb, that is the life of early childhood”** (McMillan, 1919). Jarvis, P. and Liebovich, B., 2015.

Richard Louv (2005, p.34) believes that we have created a society that is “teaching young people to avoid direct experience in nature.” He coined the term ‘Nature Deficit disorder’ and is working globally to highlight the need for children to reconnect with nature through his work with the Children and Nature Network (2016).

Cotton Wool Kids

In the past the children were resilient, robust and independent creatures, ready to give things a go. These days I am increasingly seeing children who are anxious, fearful, stressed or ambivalent. I consider two of the significant contributors responsible for this below (McBurnie, K., 2014)

Thoughts!!

**A lot of truth is said in
Memes!!**



Ouvry (2000) refers to the assumptions she discovered practitioners make to avoid going outdoors. **In particular, the weather was frequently cited by practitioners as a compelling reason for not taking children outside,** out of concern for their health and wellbeing. In fact, exposing children to different weather provides opportunity for a rich learning experience.



Mirrahimi et al. (2011, p.395) conclude in their study, The Impact of Nature on Learning, Social and Emotional Intelligence, that the outside learning environment offers **“a chance to learn, not only by hearing and seeing but also by tasting, smelling, touching, and feeling,”** providing a **“considerable source of stimulation for the process of inspired learning.”**

Physical Literacy/Motor skills

The outdoor learning environment according to **Moyles (2005) offers opportunities to learn and develop knowledge and understanding of the world as it is a much richer context than the indoors.** Tovey (2007) agrees that the outside is a “dynamic living space” that changes as children and adults interact with the environment.

The outdoor space allows **children to relive their experiences through movement, express their emotions through role play and make connections with the world around them (Ouvry 2000).** To children, outside is a blank slate on which to create endless possibilities.

“Mens sana in corpore sano,” the notion that holistic mind–body wellness is essential to full human flourishing, is an old idea periodically revisited. A recent iteration is the concept of physical literacy (PL), advanced by Whitehead (2010) as a path to heightened embodiment and being

Curriculum design and the four purposes

The four purposes should be the starting point and aspiration for schools' curriculum design. Ultimately, the aim of a school's curriculum is to support its learners to become:

- **ambitious, capable learners, ready to learn throughout their lives**
- **enterprising, creative contributors, ready to play a full part in life and work**
- **ethical, informed citizens of Wales and the world**
- **healthy, confident individuals, ready to lead fulfilling lives as valued members of society**
- www.hwb.gov.wales/curriculum-for-wales



Llywodraeth Cymru
Welsh Government

www.llyw.cymru
www.gov.wales

ambitious, capable learners who:

- › set themselves high standards and seek and enjoy challenge
- › are building up a body of knowledge and have the skills to connect and apply that knowledge in different contexts
- › are questioning and enjoy solving problems
- › can communicate effectively in different forms and settings, using both Welsh and English
- › can explain the ideas and concepts they are learning about
- › can use number effectively in different contexts
- › understand how to interpret data and apply mathematical concepts
- › use digital technologies creatively to communicate, find and analyse information
- › undertake research and evaluate critically what they find and are ready to learn throughout their lives.

healthy, confident individuals who:

- › have secure values and are establishing their spiritual and ethical beliefs
- › are building their mental and emotional well-being by developing confidence, resilience and empathy
- › apply knowledge about the impact of diet and exercise on physical and mental health in their daily lives
- › know how to find the information and support to keep safe and well
- › take part in physical activity
- › take measured decisions about lifestyle and manage risk
- › have the confidence to participate in performance
- › form positive relationships based upon trust and mutual respect
- › face and overcome challenge
- › have the skills and knowledge to manage everyday life as independently as they can and are ready to lead fulfilling lives as valued members of society.

**All our
children
and young
people
will be...**

enterprising, creative contributors who:

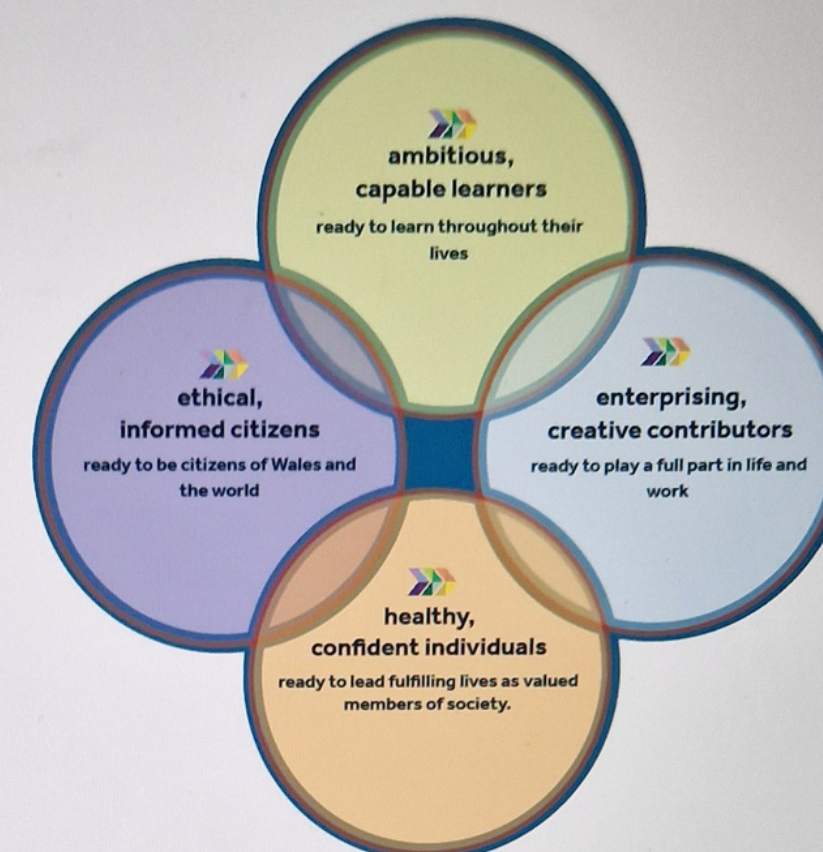
- › connect and apply their knowledge and skills to create ideas and products
- › think creatively to reframe and solve problems
- › identify and grasp opportunities
- › take measured risks
- › lead and play different roles in teams effectively and responsibly
- › express ideas and emotions through different media
- › give of their energy and skills so that other people will benefit
- › and are ready to play a full part in life and work.

ethical, informed citizens who:

- › find, evaluate and use evidence in forming views
- › engage with contemporary issues based upon their knowledge and values
- › understand and exercise their human and democratic responsibilities and rights
- › understand and consider the impact of their actions when making choices and acting
- › are knowledgeable about their culture, community, society and the world, now and in the past
- › respect the needs and rights of others, as a member of a diverse society
- › show their commitment to the sustainability of the planet
- › and are ready to be citizens of Wales and the world.

Purposes of the curriculum

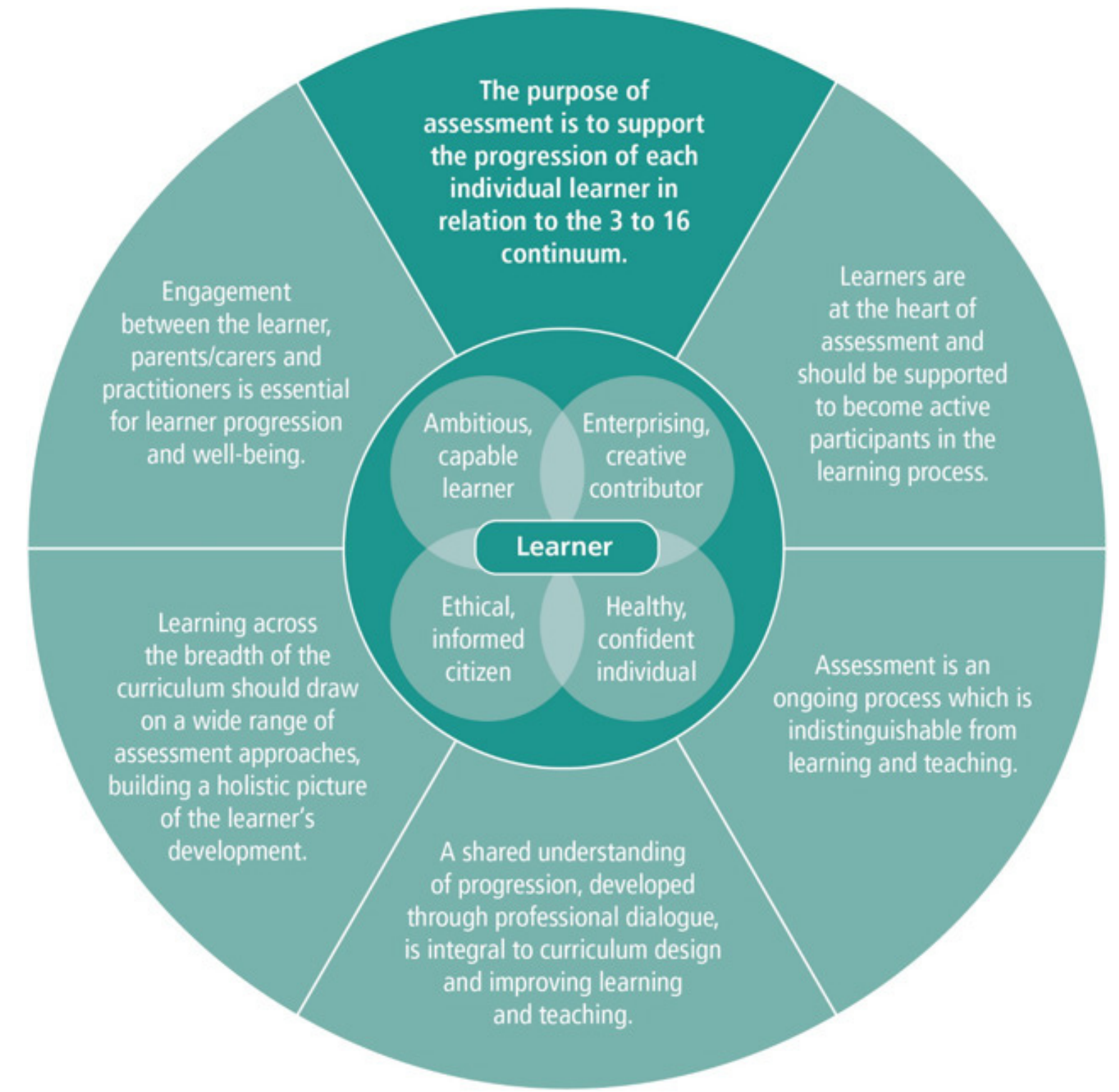
The purposes of the curriculum in Wales should be that children and young people develop as:



Assessment has three main roles in the process of enabling learner progression:

- supporting individual learners on an ongoing, day-to-day basis
- identifying, capturing and reflecting on individual learner progress over time
- understanding group progress in order to reflect on practice.

When planning and delivering learning experiences, practitioners should be clear about the specific role of each assessment being undertaken, and what the understanding gained from assessment will be used for and why.



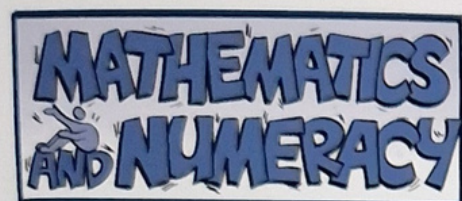
Areas of Learning and Experience



make distinct and strong contributions to developing the four purposes of the curriculum.



Should be internally coherent
employ distinctive ways of thinking



have an identifiable core of disciplinary and instrumental knowledge.



Taken together, they should define the breadth of the curriculum.

The use of outdoor settings and activities has been promoted as a means of promoting health through physical activity since the COVID-19 pandemic (Spencer et al. 2020: WHO, 2020).

Promoting outdoor activities has been linked to improvements in participants' physical and mental welfare (Spencer et al. 2020; WHO, 2020).

The health and wellbeing AoLE is intended to support students' growth so they can overcome obstacles that may arise in their lifetime.

Through physical activities and team games, it seeks to concentrate on pupils' social, moral, and physical development (Welsh Government, 2022).

of fitness and health

Ideas to support delivery – 1

Warm-up

Can children . . . ?

Perform, recognise and explain the purpose of a range of warm-up exercises?

Activities

- Mobility exercises which move joints with control, e.g. shoulder circles, upper body twists, side bends, Human alphabet.
- Activities which gradually raise the temperature and heart rate, similar to changing up gradually through car or bike gears, e.g. Wristband trail, Line up.
- Stretches (held still for 6 to 10 seconds) – progressing from whole body stretches to stretches for muscles in specific locations, e.g. back of lower leg, front of upper leg.

Questions (select from following):

- Q How do you feel after warming up?
A Warm (not out of breath) and ready for action (not tired).
- Q What is the purpose of moving joints in a warm-up?
A To help them move smoothly.
- Q Which activities mobilise joints in your spine?
A E.g. side bends, upper body twists, passing ball under and over.
- Q Which activities mobilise knees, shoulder and ankle joints?
A E.g. knee lifts, arm circles, jogging.
- Q What is the purpose of raising your heart and breathing rate in a warm-up?
A To increase the supply of oxygen to the muscles in preparation for energetic activity.
- Q When should warm-up stretches be performed?
A Towards the end of a warm-up when muscles are warm.
- Q Where can you feel the muscles stretching?
A Children can identify the location of muscles being stretched.

Effects of exercise on the heart

Can children . . . ?

Monitor and explain changes to their heart rate?
Explain the benefits of exercise for the heart?

Activities

- Children take part in energetic activities, e.g. Line exercise, Star exercise, Clock relay, Score event.
- Children monitor heart rate before and during activity by:
 - feeling their heart with one hand on centre of chest and describing changes using a heart rate chart OR
 - counting their pulse for ten seconds at the wrist or neck.

Questions (select from following):

- Q What happens to your heart during energetic activities?
A It beats faster.
- Q How can you monitor your heart rate before and during these activities?
A Children demonstrate how this can be done.
- Q What do we need to make energy?
A Food and oxygen.
- Q How do food and oxygen reach the muscles?
A In the blood.
- Q What pumps the blood around the body?
A The heart.
- Q What happens to your heart when you take part in energetic activities?
A The heart pumps faster to transport sufficient food and oxygen to the muscles to make energy.
- Q What happens to muscles if we are active every day?
A They become strong and can do more work without tiring.
- Q The heart is a muscle – what will happen to the heart if we take part in energetic activities frequently?
A It will become stronger and will be able to pump more oxygen around the body with every beat.



Effects of exercise on breathing

Can children . . . ?

Explain why rate and depth of breathing increases during exercise?

Activities

- Children take part in energetic activities, e.g. Line exercise, Star exercise, Clock relay, Score event.
- Children monitor their breathing before and during these activities by:
 - placing one hand on tummy and one on chest and feeling the chest rise and fall. Children describe the rate and depth of their breathing using the breathing chart OR
 - using the same technique, counting the number of breaths over 20 seconds (rise and fall of chest = one breath).

Questions (select from following):

- Q What happens to your breathing during these activities?
A It becomes faster and deeper.
- Q How can you monitor your breathing?
A Children demonstrate how this can be done.
- Q What do your muscles use while you are active?
A Energy.
- Q What do we need to make energy?
A Food and oxygen.
- Q How do we take oxygen into our bodies?
A By breathing.
- Q What happens to your breathing rate when you are taking part in energetic activities?
A It will become faster and deeper in order to supply the working muscles with sufficient oxygen to make the energy needed.



Effects of exercise on temperature and appearance

Can children . . . ?

Explain changes in temperature and appearance during exercise?

Activities

- Children take part in energetic activities, e.g. Line exercise, Star exercise, Clock relay, Score event.
- Children monitor their temperature and appearance before and during the activity by:
 - placing their hand on their forehead OR
 - placing thermometer strip on their forehead OR
 - asking a partner to observe their face.

Questions (select from following):

- Q What happens to your temperature and appearance during these activities?
A Temperature increases, skin becomes moist and sticky and some people appear flushed.
- Q How can you monitor your temperature and appearance?
A Children demonstrate how this can be done.
- Q When we are doing energetic activities the muscles produce energy as heat. How is heat released from the body?
A Through the skin.
- Q Why does the skin get moist?
A It is the body's way of avoiding overheating – damp skin cools quickly.
- Q Why do some people appear flushed?
A The blood vessels become wider and closer to the surface of the skin to release heat.



See the TOP Outdoors Handbook for information on warming-up and cooling-down, monitoring the intensity of activities, and the effect of exercise on the heart, breathing, temperature and appearance.

Knowledge and understanding of fitness and health

Ideas to support delivery – 2

Monitoring intensity of activities

Can children . . ?

Monitor the intensity of different activities, and roles within activities, and explain the benefits of being active outdoors?

Activities

- Children participate in different activities or roles within an activity, some of which are more energetic than others.
- Children use the 'How does the exercise feel?' scale to describe the intensity of different activities/roles.
- Children monitor their involvement in physical activity over a period of a few weeks, i.e. which activities, for how long they are performed and how each activity feels.

Questions (select from following):

- Q Why does your heart beat faster in some activities/roles?
A Some activities/roles are more energetic than others.
- Q Which activities/roles feel more energetic? Why do you think this is?
A Children will find activities/roles which involve running, jumping and dodging over a sustained period of time to be more energetic. How energetic an activity feels can vary between individuals and can depend on the child's skill level.

Health recommendations are that young people should perform one hour of at least moderate (i.e. energetic) physical activity per day.

- Q How can taking part in TOP Outdoors activities help you to reach this target?
A TOP Outdoors activities can be energetic, challenging and exciting and can involve energetic activity being sustained over long periods of time.

Health benefits of TOP Outdoors activities

Can children . . ?

Explain the health benefits of taking part in energetic activity?

Activities

- Children take part in a range of different activities:
 - team activities, e.g. Crossing the swamp, Line up, All aboard
 - individual activities, e.g. Line exercise, Blindfold trail, Photo trail
 - pairs activities, e.g. Blindfold trust, Star exercise, Wristband trail.
- Children monitor how these activities:
 - make people feel
 - use energy.

Questions (select from following):

- Q Why do people do TOP Outdoors activities?
A To be with friends, to compete, to challenge themselves, to have fun.
- Q What moods/feelings did you observe in the facial expressions of others?
A Excitement, concentration, determination, joy, fulfilment, happiness.
- Q How do these moods/feelings help people to be healthy?
A Being healthy is more than just having a healthy body. Being healthy involves people finding ways to relax, have fun and feel a sense of success and achievement when overcoming challenges. Some people find these and other health benefits through TOP Outdoors activities.
- Q What happens to someone when they are using up lots of energy?
A They feel hot and out of breath and their muscles might feel tired.
- Q Why is it important to use up lots of energy regularly?
A Energetic exercise can help to maintain a healthy body weight and can help prevent someone from becoming overweight. In addition it strengthens bones, joints, the heart and lungs, and helps them to work efficiently.

Being active outside school

Can children . . ?

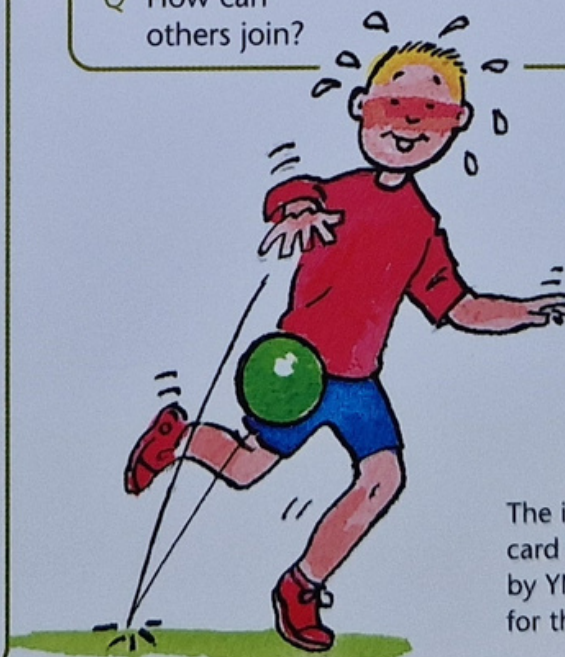
Access opportunities to take part in outdoor and adventurous activities outside school?

Activities

- Children participate in a range of TOP Outdoors activities.
- Teacher discusses where they can take part in activities like these at school and in the community.
- Children design a 'Let's get active' notice board to share information about sports and exercise activities which can be accessed in and out of school.

Questions (select from following):

- Q Which TOP Outdoors activities can be played at play time, lunch time or at home?
Q Who is a member of a local orienteering club?
Q How and why did you join?
Q What is the purpose of the club?
Q How do you get there?
Q How much does it cost?
Q What do you like about the club?
Q How can others join?



The information on this card has been developed by YMCA Fitness Industry for the Youth Sport Trust.

Cool-down

Can children . . ?

Perform, recognise and explain the purpose of a range of cool-down exercises?

Activities

- Pulse lowering activities which gradually help the heart and lungs to recover, e.g. Blindfold trust, Wristband trail or Blindfold trail.
- Stretches – progressing from one or two whole body stretches to two or three stretches for muscles in specific locations, e.g. back of lower leg, front of upper leg.

Questions (select from following):

- Q How do you feel after cooling-down?
A OK, back to normal (not out of breath or very hot).
- Q What happens to your heart and breathing rate during a cool-down?
A They recover gradually.
- Q Which activities are suitable for a cool-down?
A E.g. dribbling a ball slowly, gently jogging, brisk walking, stretches.
- Q What is the purpose of cool-down stretches?
A To prevent the muscles becoming tight and sore.
- Q When should stretches be performed?
A Stretches should only be performed when muscles are warm.
- Q Where in the body can you feel the muscles stretching?
A Children identify the location of muscles being stretched.



The culture of childhood that played outside is gone and children's everyday life has shifted to the indoors (Hart, 1999; Moore, 2004). As a result, children's opportunity for direct and spontaneous contact with nature is a vanishing experience of childhood. Not only have children's play environments dramatically changed in the last few decades, but also the time children have to play has decreased. Children need nature to grow up in a healthy way and be prepared for adult life. Child psychologists and psychotherapists are now convinced that contact between children and the natural environment is essential to ensure their balanced psychological and physical development as adolescents and adults (Ilaria, 2015).

“Everybody is a genius. But if you judge a fish by its ability to climb a tree, it will live its whole life believing that it is stupid.” - Albert Einstein

Basic bike skills and slalom course, A progression of cycling skills



Principles of progression and Development

Progression within the Health and Wellbeing Area must enable learners to revisit and deepen learning in concepts within the statements of what matters across a wide range of topics and aspects of health and well-being. Learners contexts, their physical concerns, interests and circumstances will all have an impact on what enables them to progress and the pace at which they progress. This is particularly relevant in the context of feelings and emotions.

- Increasing effectiveness as a learner
- Increasing breadth and depth of knowledge
- Deepening understanding of the ideas and disciplines within areas
- Refinement and growing sophistication in the use and application of skills
- Making connections and transferring learning into new contexts

Progression into years 8 and 9

To progress further students will:

- Maximise performance at current track level
- Move on to and maximise performance on more demanding circuits
- Improve execution regarding skill and/or speed
- Develop advanced skills (e.g. by mastering balance skills/turns on test trails set up using cones etc.)
- Assume a mentor role
- Apply skills in a more challenging “real world” setting e.g. Afan Trail, Brechfa etc.



**Bicycle Pump track and
mobility walking track**

Progression Pathway to bike track

Week 1	Introduce bike track to students. Work students around the track and explain what the track will help them achieve physically/mentally socially and environmentally. Introduce bikes to be used. Students take turns to cycle circuits of road (not track). Teacher assesses competence and capability. When students not riding, complete other tasks: how to set a bike up to ride Safety issues when Do's and Don'ts of off-road biking.	Students reflect on experience and performance and set targets for next session.
Week 2	Put students in groups of relevant competencies, Each group takes turns in riding around the track, just to familiarise themselves. Each group can establish where they are at in competency.	Each group to reflect on performance, individually and as a group, then set targets for the next session.
Week 3	Every student to show some progression, improve their starting point. Mix up the groups with the most competent and the least competent, so the better riders can assist and encourage. Reward for the most encouraging group and the most progressive. Group discussions on how they can improve their times and skills. What limitations are.	Students to implement what they have discussed and what they achieved. Plan for next session.
Week 4	Groups put previous sessions aims into practice, see if they can improve times/skills. When not on the track, rotate around other skill tasks, building motor skills and aptitude. Teacher to reassess the groups and maybe change a few riders around, based on where they are at.	Students put plans into action from previous weeks discussion. Teacher and students formulate plans for next session.
Week 5	All groups take turns to do timed circuits and compare with baseline times. Groups review performance and find out where further improvements can be made. Teacher/coach to lead discussion to give tips/advice on how to develop further. Get some feedback from pupils. Students then review their performance individually and as a group.	Students discuss the input from the whole cohort and the teacher, what plans and strategy to develop.
Week 6	Choose 2 pupils of equal skill and do time circuits. The whole cohort discuss performances. Discuss the different mix of the cohort, gender, experience, height, how daring they are, fitness levels etc. Then cross reference on abilities and compare all the different attributes, see if pupils can adapt. Groups take turns at further runs to see if they have improved times. When groups are not using track, they to do balance drills and strength work.	So group discussion with teacher input, with evaluation and plan for next session.
Week 7	Groups to do timed circuits under teacher observation. Groups not doing the circuit will do presentation/feedback. Discuss the course what were the benefits/improvements etc.	Students review performance of self and group and give feedback.

Summary

Key points:

- **Exposure to outdoors (Various activities)**
- **Practice, Repetition, Build muscle memory, Improve Motor Skills (quote Bruce Lee).**
- **Reflection, constantly appraise yourself and also by your peers for continuous improvement.**
- **Progression/Improvement skills applicable in the workplace (Kaizan) Continuous improvement.**

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