# HOW CAN WE DEVELOP A TRAIL?

## SUPPORT MATERIALS

If you need further support on specific aspects of outdoor learning these materials can enhance the engaging experiences you are providing. They can support you as you design, plan and implement your curriculum. Outdoor learning is a great way to develop learners' integral skills (creativity and innovation, critical thinking and problem-solving, personal effectiveness, planning and organising). You will want to focus on why learning matters and ensure you are meeting your learners' needs.
These materials show a path that could be taken through the activity. This is not meant to be prescriptive. You should adapt your approach depending on your learners' needs and interests and your local area.

## OVERVIEW

Learners consider trails already produced to start thinking about what makes a good trail. They investigate the school grounds to plan how they will develop a trail. They think about and note interesting features, any information needed about the features and how they will instruct others to follow their trail. Learners consider how they will measure distances for their trail and relate the speed of walking to the trail length. They also consider compass bearings and how we use the Sun and shadows to estimate time. Following peer review, they complete their trail. The skills and knowledge gained from the local trail are then extended into producing a leaflet about a longer themed trail in the local area. They research by asking others and on the internet to find out as many interesting features as they can and any pertinent information. They sketch a map of their trail, using scale and including interesting features, before developing the leaflet to encourage others to try their trail.

## CURRICULUM FOR WALES

**Areas explored:**

- Expressive Arts
- Health and Well-being
- Humanities
- Languages, Literacy and Communication
- Mathematics and Numeracy

Activity also incorporates aspects of cross-curricular skills outlined in the LNF and DCF.

## RESOURCES

Internet enabled device and internet access.
Measuring equipment, e.g. pedometers, large sports tape measures.
Compasses.
Means of recording features on the trail, e.g. tablet, smart phone, paper and pen, etc.

## DOING THE ACTIVITY

- Most tasks require learners to work in pairs or groups.
- Encourage learners to share their ideas, and through open questioning, explain and justify their ideas when possible. Focus questions have been suggested to guide learners through the tasks.
- Some tasks might be more effective if pairs or groups of learners have access to an internet enabled device.
- When taking learners outdoors, it is essential that the Countryside Code is adhered to and any relevant risk assessments have been carried out with risks mitigated.

TASK 1

## HOW CAN WE CREATE A TRAIL IN OUR SCHOOL GROUNDS?

Explain to learners that they are going to develop a trail for their school grounds.

### Screen 3

Show learners the video from Natural Resources Wales Discover woodlands and National Nature Reserves in Wales (about 1 minute).

Ask learners to discuss the questions posed.

**Focus questions**

- What types of trails are shown in the video?
- How do the trails help people to follow them?
- What sorts of things could be seen on the trails?

## Screen 4

Ask learners to review the leaflet for the Nant Y Gro Walking Trail in the Elan Valley. The leaflet is bilingual with English first. To consider what they have read, ask learners to discuss the questions posed.

**Focus questions**

- What information is given about the trail?
- Reading 'The Route' section – what do you expect to see if you walked this trail?
- Why is it important that users are reminded of a Code of Conduct?
- How useful do you think the information given is for people who have never visited the area before? Why?

## Screen 5

Ask learners to access the Natural Resources Wales webpage and locate the Barcud Trail from the Bwlch Nant yr Arian Visitor Centre, near Aberystwyth. Then, read the information given about the accessible walking trail and discuss the questions with a partner.

**Focus questions**

- What information is given about the trail?
- How useful do you think the information given is for people who have never visited the area before? Why?

## Screen 6

Ask learners to access the webpage giving the MinoTaur Trail from Mountain Bike Wales and discuss the questions with a partner.

**Focus questions**

- What information is given about the trail?
- How useful do you think the information given is for people who have never visited the area before? Why?

You could ask learners to share their ideas about all three trails with the class.

## Screen 7

As a summary of their learning, invite learners to discuss the questions posed.

**Focus questions**

- What do you think is a good trail?
- What types of things do people want to do on a trail? Why?
- What types of things do people want to see on a trail? Why?
- What information do people need to follow a trail? Why?
- What types of information do people need to enjoy a trail?

You could ask learners to share their ideas with the class.

## Screen 8

You are going to take learners outside to investigate the school grounds, so that they can plan how they will develop their trail. Ask them to consider the questions posed before going outside.

**Focus questions**

- Which features of the school grounds do you find interesting? Why?
- Which features of the school grounds might other people find interesting? Why?
- Which features of the school grounds would you include in your trail?
- What information would you need to include? Why?
- What instructions would you need to give? Why?
- How can you make sure the instructions are clear and easy to follow?

There are three main parts to this: interesting features, information about interesting features and instructions.

## Screen 9

Now take the learners outside to explore the school grounds and think about how they could develop a trail.

## Screen 10

Tell learners that all trail instructions include distances. Ask them to consider the questions posed about their own trail.

**Focus questions**

- What will you measure for your trail? Why?
- What units will you use for your measurements? Why?
- What equipment will you use to measure distances? Why?
- How will you record these measurements?

## Screen 11

Invite learners to do the interactive task to help Sam and Jo who are developing a trail in their school grounds.

The trail takes about ¼ of an hour to walk. The average walking pace is about 4.4km per hour.

**Focus questions**

- How long is their trail? (distance = speed x time)
  17.6km, 1.1km, 293m, 100m, 1000m
- What units should they use for their measurements?
  centimetres, millimetres, kilometres, metres, miles
- What equipment should they use to measure distances?
  pedometer, metre ruler, 30cm ruler, tape measure

## Screen 12

Ask learners to consider the screen which tells them that a compass is used to help with directional instructions. It asks them to complete the compass with its bearings, with north already given.

## Screen 13

Ask learners to discuss the questions posed about using compass bearings in their trail.

**Focus questions**

- How could you use compass bearings in your trail?
- Why might using compass bearings be useful to others?
- How might you show compass bearings on your trail instructions? Why do it like this?

You could ask learners to share their ideas with the class.

## Screen 14

This screen tells learners that in the past, before compasses, explorers were able to use the Sun to work out their direction of travel. Ask learners to discuss the questions posed.

**Focus questions**

- What do you know about the Sun and how it seems to move across the sky?
- What does the position of the Sun in the sky tell you about the time of day?
- What do you know about sundials?
- How do sundials use the Sun's light to show the time of day?
- How could you use the Sun's position in the sky in your instructions?

## Screens 15-17

The next few screens ask learners to show their understanding of the Sun's position in the sky and the time of day, including shadows and sundials. They end with questions to check their understanding that light travels in a straight line and the relationship between the Sun and the Earth.

**Focus questions**

- Why does light cause shadows?
- Why does the Sun seem to move across the sky?

## Screen 18

Before you take learners outside to begin designing their trail, suggest that while outside they will need to:

- Make a sketch map and notes for their trail.
- Record measurements, directions, any changes in direction, and any notable sights, sounds, artefacts or other things of interest.
- Take photos and/or audio/video clips if they wish to use them to help explain their trail to others.

## Screen 19

Take learners outside to design their trails.

### Screen 20

Once back inside, ask learners to tidy up their trail notes, etc. so that they are ready to show others.

Invite them to share with another pair and discuss the questions posed.

**Focus questions**

- How easy is the trail to follow?
- What else could be added to the trail to make it easier to follow?
- How interesting do you think the trail is?
- What else could be added to the trail to make it more interesting?

Then, invite learners to make any amendments to their trail following the feedback received.

TASK 2

## HOW CAN WE CREATE A LOCAL TRAIL?

Explain to learners that they are going to develop a longer trail for the local area. The trail can be for walkers, cyclists, scooters or for others with accessibility needs and it will need to be themed, e.g. historical, cultural, nature, etc.

### Screen 3

As the screen, tell learners that trails can be designed for local people, as well as for people who don't live in the area. Explain that we are now going to think about trails outside of our school grounds and in their local area. Ask them to discuss the questions posed to start their thinking on developing their trail.

**Focus questions**

- What do you enjoy/like about the area you live in? Why?
- Who visits your local area? How do you know? Why do they visit?
- What is the area you live in famous for? Why do you think that?
- What landmarks are there locally? How do you know?

Invite learners to collate their ideas on a mind map about their local area, which they will add to over the next few screens.

## Screen 4

Ask learners to do an internet search, to find 10 new facts that they didn't know about their local area and add these to their mind map. Then, to discuss the questions posed.

**Focus questions**

- What did you find out from your internet search?
- What surprised you the most? Why?
- What new landmarks did you find out about?

## Screen 5

Invite learners to discuss with friends and family at home about why people might visit the local area. Suggest they speak to older relatives about how the local area has changed over time.

Back in school, ask learners to discuss the questions posed.

**Focus questions**

- What did you find out from your interviews?
- What surprised you the most? Why?
- What new landmarks did you find out about? From whom? How did they know about them?
- How have the reasons people visit the area changed? Why?

Then, to add their ideas to their mind map.

## Screen 6

Explain to learners that they are going to use all the information they have to create a themed trail around the local area. Ask learners to decide on the type and theme of the trail they will create through discussing the questions posed.

**Focus questions**

- Which type of trail will you develop? Why?
- Who will you develop your trail for? Why?
- What theme will your trail follow, e.g. artistic, historical, nature, sporting, language, etc? Why?

## Screen 7

Invite learners to make a list using the information on their mind map of:

- the interesting places they could include
- the information they will need to give so that others can follow their trail.

## Screen 8

The next screen gives an interactive map. Ask learners to use the map to:

- decide on a start and end point for their trail
- locate the interesting places they wish to include in their trail
- work out the distance between each interesting place
- work out the distance between each interesting place and the start and end points of their trail.

You will need to 'View larger map' to see the map scale.

## Screen 9

Ask learners to consider the information shown on the elevation graph, e.g. elevation (the rise above sea level), the terrain and how difficult it is to hike.

## Screen 10

Ask learners to sketch a trail map showing start/end points, monuments, areas of interest, local features and buildings, etc. To help them produce their trail map, ask them to discuss the questions posed.

**Focus questions**

- What are the main features and landmarks you will include in your trail? Why will you include these?
- How will you direct people to find the features and landmarks on your trail?
- How will you:
  - use scale on your map
  - show the elevation of your trail
  - show how easy or difficult it is to move through the terrain?

## Screen 11

Explain to learners that a map has contour lines showing elevation above sea level. If you walked following a contour line, you would always be at the same altitude above sea level. When contour lines are close together the elevation will be steep and when they are far apart it will be a gentle slope.

## Screen 12

Explain to learners that to develop an accurate elevation map they need to find the contour lines on a map. Following the instructions on screen, ask learners to follow their trail on the Google map, noting any changes in altitude and the distance from the starting point.

## Screen 13

Ask learners to record the altitude at points on their trail, for example, at every 100m and note the data in the table on screen. Using Excel, ask learners to transfer the data to a spreadsheet and create a scatter graph to show this data.

## Screen 14

Invite learners to share their trail map with another pair. Ask them to consider the questions posed.

**Focus questions**

- How easy is the trail map to follow?
- What else could be added to the trail map to make it easier to follow?
- How interesting is the trail?
- What else could be added to the trail map to make it more interesting?

Then, to make any amendments to their trail map following the feedback received.

## Screen 15

Ask learners to review the leaflets from Task 1 and discuss the questions posed.

**Focus questions**

- What categories of information are given about the trail?
- How is the information organised? Why do you think it is organised in this way?

## Screen 16

Invite learners to make a leaflet to showcase their trail. This can either be as a Word document or on paper. Remind them to include:

- reasons why the trail is good
- start and end points
- distances
- details about interesting features, including images, etc.
- elevation, terrain and difficulty
- map with scale
- directions.

You could display the leaflets in school for others to review or invite people into school to showcase them or even ask other learners to try out the trails.

## Screen 17

Invite learners to reflect on the whole task by completing at least one of the sentence starters and share these in class. The sentence starters are:

I understood better when...; The thing that really helped me today was...; One thing we did today that made me realise...; To improve I could...; After reading, I...; I could use this strategy when...; After talking to...; The next time I could...; The thing I found most difficult was...; One idea/thing I still don't understand is....