EXPLORERS AND EXPEDITIONS

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 three explorers and their most notable expeditions: Henry Morton Stanley finding Livingstone, Tori James the first Welsh woman to climb Everest and Scott and his Terra Nova expedition. From studying these, learners develop their ideas about the equipment, training, skills and aptitudes required for a good explorer. They go on to develop an orienteering course for younger learners in the school grounds and trial it. Learners consider the expeditions in the Duke of Edinburgh's Award before developing an expedition in the local area. They trial the expedition to improve it and produce a digital video presentation to show to an audience of people who are involved with the DofE Awards, local walking/hiking groups and other local groups who use the outdoors.

CURRICULUM FOR WALES

Areas explored:

- 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.
Hwb account (Office 365) or https://sway.office.com/.
Means of recording sights and sounds, e.g. tablet, smart phone, paper and pencils, etc.
Measuring equipment, e.g. pedometer, large sports tape measure.
Compasses.
Squared or graph paper if learners require these to draw a map to scale.
Where possible, paper maps of relevant areas.

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

WHAT MAKES A GOOD EXPLORER?

Explain to learners that you will be looking at three explorers and an expedition each has done to try and work out the skills and attributes that are needed by an explorer.

Screens 3-4

Invite pairs of learners to develop good questions to ask about the image using a WWWWWH grid. Then, join with another pair to consider their questions and try to answer them.

Screen 5

Show learners the information about Sir Henry Morton Stanley.

Stanley was born in Denbigh in 1841. His birth name was John Rowlands. He explored vast areas of central Africa in his lifetime. Stanley was commissioned by the New York Herald to search for Scottish missionary and explorer David Livingstone, who had set off to search for the source of the river Nile in 1866.

Stanley was a very interesting person. The information on the screens just describes simple details about his expedition to find Livingstone. However, if you wish, you could ask learners to find out more about him and his life which is well-chronicled in Wikipedia. Although born in Wales, he denounced his Welsh heritage and there is much online detail as to possible reasons why, e.g. National Library of Wales and the Institute of Welsh Affairs.

Screen 6

Invite learners to read further information about Stanley:

Stanley's expedition through dense jungle lasted 236 days and was over 700 miles long. Then, to discuss the questions posed.

Focus questions

- How many miles did the expedition walk on average each day?
- The average walking pace in the UK is 3 miles per hour. What does the expedition's speed tell you about the terrain and conditions?
- What types of equipment do you think the expedition had? Why?

Then to make a list of the equipment they think the expedition had.

Screen 7

Ask learners to consider the fact that – The expedition crossed many large rivers and to discuss the questions posed.

Focus questions

- How did the expedition cross the rivers?
- What other equipment do you think they had to cross rivers? Why?

Then, to add these types of equipment to their list.

Screen 8

Invite learners to consider the equipment that could be used today to repeat Stanley's expedition, in 1871. Ask them to choose the three most important things to take and be ready to explain to others their reasoning.

mobile phone, machetes, knives, maps, compass, ropes, insect repellent, guns,

long bows, waterproof clothes, sleeping bags, tarpaulin.

Invite learners to think about what else they would like to take and again, be prepared to explain their reasoning.

Screen 9

Here we introduce Tori James. Tori was the first Welsh woman to climb Mount Everest, at the age of 25, making her the youngest British woman to complete the ascent at the time. Tori was part of a four-strong team who trained together for 18 months to prepare them for coping with the extreme conditions on the climb.

Screen 10

Show learners the video On Top of the World (about 10 minutes) and ask them to discuss the questions posed.

Focus questions

- Why do you think Tori and her team had to train for 18 months before the expedition?
- What physical attributes are needed for climbing Everest? Why?
- Altitude sickness is discussed in the video. At altitude there is less oxygen in the air. How might this affect someone? Why?
- What mental attributes are needed for such an expedition? Why?

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

Screen 11

Show learners the interview with Tori about the training she did prior to climbing Everest and the levels of fitness required.

Screen 12

Invite learners to consider the types of training required for an Everest summit climb:

- Cardiovascular training
- Strength and endurance training
- Altitude training
- Hiking (in ice and snow) training
- Mental endurance training.

Allocate each pair one of the types of training and ask them to research on the internet to find out more about it. Then, to produce a Sway to show others what the training involves and why it is important.

Screen 13

The screen gives instructions as to how to make a Sway.

- Login to your Hwb account, access Office 365 and find and open Sway. Or click here to access Sway: Sway
- Click Create new.
- A Sway card will appear, now add a title to your Sway. Try the name of the type of training you have researched.
- Click Background image. Sway will begin to search for images relating to your title. These will be displayed on the right-hand side. Click the category that suits your title. Choose an image and drag and drop on to your title card. You can search for videos in the same way.
- Now click Play... Sway will use algorithms based on graphic design to suggest the appearance.
- Practise changing the graphic design.
- Click on + to add other images with text to include what you have found out about the type of training.
- Share your Sway with the class.

Screen 14

Introduce learners to Scott's South Pole expedition – the Terra Nova (named after the ship used).

On 15 June 1910, a large, excited and noisy crowd cheered a heavily laden ship as she left the Roath Basin in Cardiff's docklands. SS Terra Nova was headed south – to Antarctica. On board were Captain Robert Falcon Scott and members of his British Antarctic Expedition, who aimed to be the first to reach the South Pole. In his team was Edgar Evans from Rhosili, on the Gower. The trek in Antarctica was about 1,800 miles.

Screen 15

Tell learners that Scott knew he was in a race with Roald Amundsen, a Norwegian explorer, and his team. Then, to watch the video about Scott's expedition (about 5 minutes). Ask learners to discuss the questions posed.

Focus questions

- Why did Scott come second in the race to the South Pole? List as many reasons as you can from the video.
- How do you think Scott felt when his team came second? Why?
- How did Scott and his team die? What happened to each of them?

There is a comprehensive article about the race on Wikipedia.

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

Screen 16

Invite learners to consider some of the equipment Scott and his team used and the sketched image of an explorer of that time. Scott's equipment is given as: 13 sledges, 2 motorised sledges, 10 ponies, 24 dogs, wool and cotton clothing, wooden skis, snow goggles, tents, wool sleeping bags. Ask learners to discuss the questions posed.

Focus questions

- How might some of this equipment have been problematic for Scott and his team? Why?

Screen 17

Give learners further details about Edgar Evans, the Welsh member of the final five of the polar expedition.

Edgar Evans was the first of the polar party to die, and it has been widely accepted, that his demise was set in motion by a number of falls. The most serious of which was on February 4th 1912, when both he and Scott plunged through a crevasse. As a result of the serious concussion he suffered in this accident, his condition gradually deteriorated, and he died on February 14th shortly after a bout of delirium. Evans had also concealed from Scott a very bad cut to his hand, suffered when working on sledge runners, during the outward march.

Screen 18

This screen has details about Edgar Evans described by Scott as “a giant worker, he is responsible for every sledge, every sledge-fitting, tents, sleeping-bags, harnesses, and when one cannot recall a single expression of dissatisfaction with any one of these items, it shows what an invaluable assistant he has been.”

Ask learners to discuss the questions posed.

Focus questions

- What attributes did Edgar Evans have?
- What skills did Edgar Evans have? Why do you think that?
- How did these attributes and skills make Edgar Evans an ideal explorer?

Screen 19

Invite learners to consider the skills and attributes needed by an explorer. Ask them to think back through the task, to complete the table to show their thoughts.

There are pop-ups on skills and attributes...

skills = the ability to do something well or expertise, e.g. planning, organising, carpentry, cooking, writing, etc.

attributes = a quality, character, or characteristic given to someone, e.g. hard working or tenacious or determined or vivacious or optimistic, etc.

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

Screen 20

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....

TASK 2

HOW CAN WE DEVELOP AN ORIENTEERING COURSE FOR OTHERS?

Explain to learners that they are going to develop a simple orienteering course for younger learners in the school grounds.

Screen 3

The first screen gives the background for the task:

You are going to develop an expedition for younger learners in school. The expedition will be in the school grounds or local area. The expedition will be an orienteering one, with control points and participants will follow a map. Each control point will give participants a clue or directions to the next control point. It will also give a letter to collect.

Screen 4

Invite learners to follow the instructions on screen to complete the interactive activity demonstrating a simple orienteering course. This should demonstrate the type of course they are aiming to set up.

Screens 5-6

This screen gives information to learners as to the expectations.

Your teacher will take you out around the school or local area to look at where you could develop your orienteering course.

Outside, you will need to:

- take photos, video or audio clips or make sketches to show areas you could use for your course
- make notes about where your control points might be.

Then, invite learners to go outside to plan for their orienteering course.

Screens 7-8

Once back inside (if necessary), learners need to plan how to draw their map. Ask learners to discuss the questions posed.

Focus questions

- What needs to be shown on our map? Why?
- How can we draw a map to scale? When have we used a scaled map before? What did it look like?
- What scale shall we use? Why?
- How can we use compass bearings on our map? Why might compass bearings be useful?
- What measurements do we need to take? Why?
- How are we going to take measurements? Why do it like this?
- How can we warn people of any risks or safety issues on the map?

Then, invite learners to go outside to take the measurements and note where due North is for their map.

Screen 9

Once back inside (if necessary), learners will need to work together to draw their scaled map. If learners struggle with scale, you could give them squared or graph paper to support their map drawing. Remind them that a good map needs to include:

- all buildings and features – with shading and/or symbols to show what they are
- a key to show what each symbol means
- a scale
- where due North is.

Screen 10

Invite learners, in their groups, to work on the start and end points and the control points. Tell them that each control points should give participants a letter, which when put together gives an anagram of a word, e.g. L, O, Y, S, G would give an anagram of YSGOL. Then, ask them to discuss the questions posed.

Focus questions

- Where is the course going to start and end? Why?
- What anagram are we going to use? Why?
- How many control points should we have?
- Where should each control point be? Why?
- What clues are we going to give to get to the next control point or the end? Why?
- What types of clues are we going to give, e.g. compass bearings, number of paces, number of metres, etc?

Also, tell them that it will also need to show any risks or safety issues for younger learners who do the course.

Screens 11-12

Invite learners to think of the practicalities for participants by discussing the questions posed.

Focus questions

- What equipment will your participants need? Why?
- What do your participants need to know before they start the course? Why?
- How might the weather affect your course? How could you minimise the impacts of the weather for participants?
- What skills and attributes will your participants need? Why?
- Will participants need any training before they do your course? Why?

Then, to make any clues needed and go outside to set up their orienteering course.

Screen 13

Ask learners to invite younger learners to try their orienteering course. Tell learners that they need to observe them as they do the course to see what they found difficult or easy. Also, to note any equipment they used and any skills and attributes they showed.

Invite learners to talk to the participants after doing the course to see what they enjoyed or didn't enjoy as much. Also, to ask them for any things that could be done to make your course better or clearer in terms of clues. Finally, invite learners to make any changes needed to improve their course.

TASK 3

HOW CAN WE DEVELOP AN EXPEDITION FOR OTHERS?

Explain to learners that they will now use all the knowledge, understanding and skills to set up an expedition for others in the locality. However, first they will look at the Duke of Edinburgh's Award (DofE) because a part of this award is an outdoor expedition.

Screens 3-4

These two screens give information about DofE.

What is the Duke of Edinburgh's Award (DofE)?

The DofE is many things to many people, supporting generations to successfully navigate adult life through fun experiences, opportunities to try new activities, visiting new places and making brilliant friendships.

14-24-year-olds can do a DofE programme at one of three levels which, when successfully completed, leads to a Bronze, Silver or Gold Duke of Edinburgh's Award.

There are four sections to complete at Bronze and Silver level and five at Gold. They involve helping the community/environment, becoming fitter, developing new skills, planning, training for and completing an expedition and, for Gold only, working with a team on a residential activity.

Tell learners that we are going to look at the expedition section to help them develop your own. The expedition must be of the correct duration and meet the minimum hours of planned activity.

- Bronze: A minimum of 2 days, 1 night; 6 hours of planned activity each day.
- Silver: A minimum of 3 days, 2 nights; 7 hours of planned activity each day.
- Gold: A minimum of 4 days, 3 nights; 8 hours of planned activity each day.

All expeditions must be supervised by an adult (the Expedition Supervisor) who is able to accept responsibility for the safety of the team. Point out to learners that participants must be adequately trained to safely complete an expedition in the environment in which they will be operating.

Screen 5

The DofE gives suggestions for the type of expeditions that could be done. Invite learners to access the website and discuss the questions posed.

Focus questions

- Which ideas for expeditions interest you? Why?
- Which expeditions could be done in your local area?

Screen 6

Explain to learners that each group is now going to develop an expedition for a day away from school in the outdoors. Ask them to discuss the questions posed.

Focus questions

- What type of expedition you are going to develop? Why?
- How are you going to guide people through your expedition? What types of clues or support will you give them?

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

Screen 7

Invite learners to use the map to locate where their expedition will take place. You will need to 'View larger map' to see the map scale'. Then, to discuss the questions posed.

Focus questions

- How long will the expedition be?
- How long will it take someone to do the expedition?
- What is the terrain like? How could this be difficult for some people?
- What training will people need to do the expedition? Why?

Screen 8

Explain to learners that the DofE also gives guides on equipment lists. Invite them to access the website and discuss the questions posed.

Focus questions

- What are your thoughts about the equipment list?
- Does anything surprise you about the equipment list? Why?
- What types of equipment might each participant need for your expedition?
- How might your equipment list be weather dependent?

Screen 9

Explain to learners that earlier, they looked at the skills and attributes needed by explorers and those who did their orienteering course. Ask learners to discuss the questions posed.

Focus questions

- What skills might your participants need? Why?
- What attributes might your participants need? Why?
- How might the skills and attributes needed be weather dependent?

Screen 10

Invite groups of learners to develop their expedition. Remind them to include:

- where it is
- what it is
- how long it is
- how long it will take someone to do the expedition
- any equipment participants will need
- the skills and attributes participants will need
- the training participants will need before the expedition
- how some aspects of the expedition might change depending on the weather.

Screen 11

Remind learners that earlier, they looked at the training needed to climb Everest. The different types of training were cardiovascular, strength and endurance, altitude, hiking in ice and snow, and mental endurance. Ask them to consider the questions posed.

Focus questions

- What types of training will our participants need to do before the expedition? Why?

Screen 12

Ask learners to develop a training programme for their participants and to complete the table to show their ideas.

Screen 13

Ask learners to try their training programme over a week and then discuss the questions posed.

Focus questions

- How well did the programme work? How do you know?
- What benefits did the programme give you?
- What changes could we make to the training programme to improve it? How would these changes improve the outcomes?

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

Screens 14-15

Tell learners that they are going to go out and try their expedition. When they have tried it, and made any improvements, they will make a video about it. Ask them to discuss the questions posed.

Focus questions

- What evidence or information do we need to collect?
- How might different types of information be used in a video presentation?

Remind them that they will need to take with them means of recording evidence and information.

Screen 16

Back at school, ask learners to reflect on their expedition by discussing the questions posed.

Focus questions

- What worked well on our expedition? Why?
- What didn't work as well on our expedition? Why?
- How can we change our expedition so that it works better?

Then, to modify their expedition to improve it.

Screens 17-18

Explain to learners that they are going to present their expedition digitally, as a short video (maximum 2 minutes). Tell them that their audience will be people who are involved with the DofE Awards, local walking/hiking groups and other local groups who use the outdoors. Ask learners to discuss the questions posed.

Focus questions

- How will you develop a video about your expedition?
- Who in your group will do what? Why?
- What important information do you need to include? Why?
- What visuals will you use? Why?
- What audio will you use? Why?
- How will you ensure your video is only 2 minutes in length?

Then, invite learners to make their presentations and present them.

Screen 19

This screen gives a reflection triangle for learners to consider the strategies they used to develop their expedition. Invite learners to start at the base of the triangle and think about the ways they worked: individually, groups, online, paired work. Then, to consider the strategies they used from: reading, researching, drawing, reviewing prior work, classifying, discussing, making prototypes, using models, using examples, making lists. They can also suggest other strategies used. Finally, ask learners to consider which strategies worked the best. This latter information will be useful for similar future activities.