Road Race

A fieldwork activity using the free OS maps for schools

Background

This module has been designed to be a relevant and interesting activity to enable students to practice map skills and fieldwork techniques, using the free OS maps for schools. It is aimed at year 8 or 9.
Students will be presented with a fictional scenario of a "5k road race proposal" in their area, and will be required to use their map skills and various fieldwork techniques to investigate the proposed routes. Students will use thinking and problem solving skills to make informed decisions about which is the most suitable.
This activity could be presented as a "fieldwork mystery" where students take on the role of "fieldwork detectives" who investigate the options make decisions to solve the question "which is the most suitable route for the proposed 5k road race?"

Aims

1. To practice and consolidate map skills learnt in the classroom.
2. To learn and carry out a variety of fieldwork techniques

Objective

Students work in small groups and use a variety of fieldwork techniques to investigate three proposed routes for a 5K road race in their local area.

Format

Starter

Show students the PowerPoint presentation and introduce the "scenario" of the proposed road race. Provide students with map extracts of the local area with three potential routes marked on (Label them clearly – A, B and C. They can overlap, and each should be 5K give or take a bit! Try to ensure that there is an obviously "better" choice than the other two for students to choose after they've investigated them, e.g. less traffic disruption, less hilly, more attractive, less opposition from locals likely). In pairs they should look at each of the routes and fill in the starter activity sheet.

Main

The aim of the main activity is to use their OS map extracts to investigate each of the proposed routes and complete the activities on the worksheet (this should be given out, and gone through). Divide the class into 3 equal-sized groups (9-10 per group). Each of these groups should then be sub-divided into three smaller groups of 3-4. Each small group will have the responsibility of data collection for *one* of the proposed routes. Once back in the classroom, each group will share their data with the other two groups.
Each group will have a fieldwork booklet to complete for the route they have been assigned. This will involve them;

1. Carrying out traffic counts
2. Conducting questionnaires
3. Conducting environmental Quality surveys
4. Deciding the best locations for the water / first aid stop, and drawing a field sketch

Guidance and writing frames have been provided in the field work booklet.

Follow-up

Each of the three "sub-groups" who have collected data for each of the three proposed routes should complete the "follow-up (1)" resource sheet, which will summarise their findings. They should then share this with the other two groups, and complete "follow-up resource (2)".
Once each group has a set of data for each of the three proposed routes, they can complete the "report" resource. Here, they present their findings and reach conclusions about the most suitable route, justifying their decisions.

Differentiation / Extension

During the fieldwork - more able students can complete all tasks. Alternatively, individuals/pairs of students could be given a role/task which they are in charge of, reducing the load for less able students - the groups results can then be shared once back in the classroom. More able students could be encouraged to develop their own questionnaires, and/or additional surveys. They could write up their investigations more formally with introduction, aims, methods, results, analysis, conclusion and evaluation.
In the follow-up, peer support is important in completing the follow-up resource sheet. The "report" resource gives guidance and sentence starters to aid less-able students.
More able students who finish early could design a "race promotion" poster to be put up around the local area. It should have details about the race and an annotated sketch map of the route. There is also scope for examining the potential impacts of the race on public transport by looking at bus routes.

Embedding this fieldwork activity

The National Curriculum outlines the map skills which students should be taught and given the opportunity to practice. It also details the fieldwork opportunities and skills which students should learn and practice. Ideally this activity would be carried out later in KS3 when students have a sound knowledge of using OS maps and are able to follow a route and identify features on it as they go. This is also an ideal opportunity to introduce some basic fieldwork techniques for the students to learn and practice. This will become important for those who take GCSE geography and carry out coursework investigations. Questionnaires are also a technique which may come up in work for other subjects.

Adapting this activity for alternative sites

Due to the nature of the activity, suitable routes could be found from most schools, and it doesn't matter if they overlap. If only one route is available, the fieldwork activity could be adapted so that students simply weigh up the advantages and disadvantages (potential impacts) of the road race, rather than comparing and selecting the best route from a choice. This may be the more appropriate approach with less able students or where there are time/staffing constraints.

Resources

- PowerPoint presentation
- OS map extracts of the local area, showing three proposed routes; A, B and C
- Other resource sheets for starter and follow-up activities
- Field work activity booklets
- Map cases if possible
- Clip boards