



G Joe Raphical was brutally murdered after enjoying a quiet drink in the Swallow Falls public house, outside the village of Betws-y-Coed, on Tuesday 30 April at around 8.15 pm. He was aged 28 and single, and believed to be a visitor from the West Midlands area. He was dead within seconds of being attacked and his body was dumped in the river; a post-mortem revealed two slash wounds to the chest and that he had been in the river for two hours. The question is, who killed him?

In a dual attempt to boost numbers around options time, and also to encourage the gifted and talented in our school to see that geography was not just about processes and places, I devised a murder weekend for a group of Year 9 pupils.

The theme of the weekend was the detection of who, where and why did a young geographer called G Joe Raphical die on holiday in Snowdonia National Park. This was linked to units delivered in the autumn term (crime in the community and National Parks).

What did they do?

We used the Wolverhampton Outdoor Education Centre (OEC) at Capel Curig as our base for the weekend trip. After departing the school at 5 pm on a snowy January Friday evening, the pupils were briefed as to what they had to do over the next 48 hours.

They were given the victim's name, which brought roars of derision about my sense of humour. Then they were given the six suspects' names (many thanks to the Staffordshire Learning Network Geography website for these). With the money from the RGS award, we were able to use new analytical instruments for soil analysis and create 60-second video diaries, which were played, to hoots of laughter,

on Friday. (Thanks to the members of staff who were pretending to be each of the suspects.)

Friday evening

On arrival at the centre the pupils were split into six groups/teams for the weekend, each having to come up with their own detective names. After settling, we went to the classroom, where I had set up the first pieces of evidence. This took the form of six pairs of shoes (many thanks to colleagues who donated unwanted footwear) each filled with soil. These were the suspects' shoes, which the pupils were to compare with the sample they already had taken from the victim's shoes. I had already prepared at school three basic types of soil – one sandy, one clay and the last one loam – by mixing my garden soil with varying percentages of sand.



The pupils were then given a suspect each and had to analyse the soil using the settling technique outlined in the booklet. They then left these to settle out overnight.

After the soil testing the centre staff took the pupils out for a night walk, which, after the long school day and journey, was enough to get them to bed quickly and quietly.

Saturday morning

After checking their soils sedimentation experiments, and interpreting the soils using a triangular graph of soil compositions, the teams were ready for the next crime scene. Each team was given a map extract showing a route along a local river and the location of where G Joe Raphical's body was found. They were sent out along the route at timed intervals and had to use map skills/orienteering to find the location on the river bank where the body was found. This was executed so enthusiastically that teams were finding and recording clues even when there were none!





Geographical murder mystery in north Wales
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Once at the location on the river, the teams were given a stopwatch, 10-m length of rope and a tennis ball. They had 10 minutes to devise a method of measuring the velocity of the stream using these tools (no prompting was given by staff, but lots of hints about Year 7 river study fieldwork were dropped). Once they had devised their method they repeated it three times to get an average speed, then velocity.

That afternoon we were taken on outdoor pursuits by the OEC staff to allow team building and plots to thicken.

Saturday evening

After a good day's sleuthing in the river, the teams were given time in the evening to compare their soil findings with those of the victim and also used their river velocity measurements, along with a local Ordnance Survey map, to figure out where the body entered the river.



How? They had an autopsy report that said the victim was in the water for two hours, so by some simple numeracy skills they could calculate the distance travelled at the velocity they recorded. Once the distance had been plotted on the Ordnance Survey map back upstream, they could see which of the suspects' houses (conveniently four of the suspects lived by the river) were closest to the entry point of the body to the river. We went to bed mentally and physically tired but ready for the final day and the who dun it?

Sunday morning

The teams were informed after breakfast that one of the suspects had tried to flee in the night, but fortunately for us the final pieces of evidence had been blown away in a local wood (and oh so conveniently the pieces of evidence happened to coincide with an orienteering course set out by the OEC staff). So the teams were issued with Ordnance Survey maps and



checkpoints and set off on an orienteering course to collect as much evidence as they could in two hours. After a few red faces from certain teachers when one group had to be reminded of what the blue lines on the map were for, all the teams engaged and ran themselves into the ground.

Back at base they were showered and fed and then given one hour to put together their interpretation of who, what, where and why.

In conclusion, it took a lot of work to set up and with the help of my department – Rachel Cutter; Jodie Mills and Laura Tunstall – and Highfields Science Specialist School along with the staff at The Towers OEC, Capel Curig, it has been a worthwhile project. We now use it regularly in the summer term as a reward for those pupils

who have worked hard during the year; we have had requests from parents to participate.



In terms of impact on the subject, it has raised the profile of the department with parents and governors, senior leadership of the school and the wider community through media and joint ventures with other schools. For next year we are developing a locally based murder mystery, which will allow us to invite parents along with their children to learn or practise map skills and use the free Ordnance Survey maps that the Year 7 students receive.