

The Dangers of Volcanoes

What would it be like to be near an erupting volcano?
How a group of Year 7 students used digital media to discover and present new geographical knowledge.



Contents

Introduction

Primary School
Case Studies

Secondary School
Case Studies

Conclusions

Appendix

The Dangers of
Volcanoes

Key Stage 03
Geography

Ryan Lewin, a geography teacher at Brislington Enterprise College, an 11–18 school in south Bristol, felt it was important to ensure that he was beginning to use the new-build school's extensive ICT provision to go beyond motivating and engaging pupils.



He aimed to develop his Year 7s' digital literacy skills through a week-long themed enquiry topic with a digital output to communicate learning. With a number of digital technologies available to his students, Ryan wanted to support his students to make discerning choices about their communication platform, to think about the context and audience, and discuss the possibilities offered by particular technologies as well as their limitations.

The Year 7s were set a task of working **collaboratively** to research and **communicate**, through a digital media of their choice, information that would help their peers to understand the dangers of volcanoes and why people continue to live near them.

Following some 'scene setting' activities in which Ryan used YouTube to show volcanoes erupting, students were asked to write or draw a representation of what it would be like to be near an erupting volcano.

Ryan then asked students to get into groups of three or four others with whom they would work well. He then asked them to plan their project, which he supported by providing the following prompt questions:

- What is your task?
- What do you need to find out?
- What is your audience?
- How do they like to learn?
- What resources do you want to use? Why?

Contents

Introduction

Primary School
Case Studies

Secondary School
Case Studies

Conclusions

Appendix

Before the students began their collaborative internet research, Ryan initiated a class discussion about how to find and evaluate relevant information on the web by using a spoof blog as a talking point. If the students came across such a blog on the internet how would they know the information was reliable? They discussed verifying information by visiting other more well known sites and comparing information from different sources.

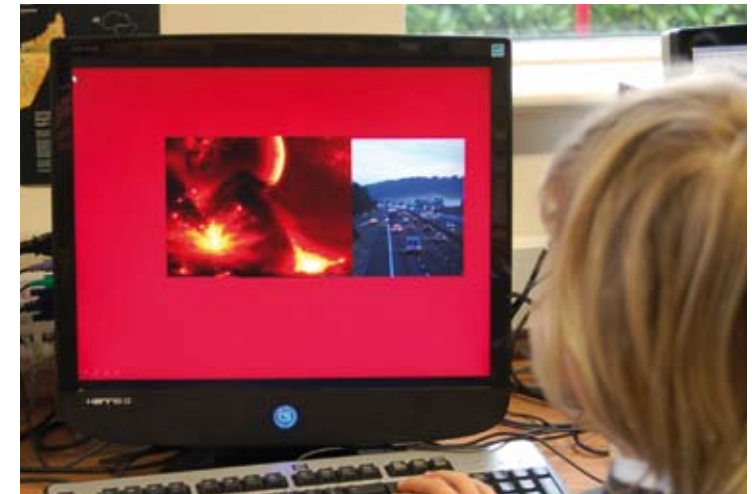
Ryan also gave the students a number of websites he recommended and supported them to plan their research by considering the following questions:

- What are you going to look for?
- Where are you going to find it out?
- Why do you think this is the best place to look?
- How are you going to use the information that you find?
- How will you know you can trust it?

They had a series of lessons over a week to collaboratively research their topic and produce their outputs which they would show to each other. Each group of students was given one school laptop and one mini laptop, both with internet access. They also had use of digital stills and video cameras.

Students' choices of output were wide and varied; some groups created blogs, some made PowerPoint presentations, some created models of erupting volcanoes which they then filmed and one group created a spoof documentary-style video.

In the final lesson, after students had presented their work to the rest of the class, Ryan encouraged them, through class discussion and written tasks, to reflect on the quality of their research, the effectiveness of their communication and what they had learnt about volcanoes.



Contents

Introduction

Primary School
Case Studies

Secondary School
Case Studies

Conclusions

Appendix

Successes and next steps

The students enjoyed the creative aspect of the activities, reporting that “it was probably the best project we’ve done.”

They also worked well together and reflected on the process of collaboration students reporting that in some respects, this success was due to assigning roles to each person in the group.

“We all had different jobs to do and so we all had to get our job done to get it all sorted.”

Year 7 boy

It was challenging to find a way for students who had not chosen to use PowerPoint to represent their work to the rest of the class. Students attempted to give presentations even when they had created blogs. This reflects a common issue in classrooms, where the focus is often on students standing at the front of the classroom presenting their learning, rather than on whether information was communicated effectively in the chosen media.

As students are supported to further develop their digital literacy they need to consider modes of presentation and the needs of the audiences they are trying to reach eg a blog is designed to reach a very different audience than that of a PowerPoint presentation.

Audience awareness is also key to supporting students to develop effective research skills. Although students in this project were supported to think carefully about their use of PowerPoint, there were still some incidences of information being copied and pasted from the internet onto the presentation slides. Providing a real context and audience for their work can support students to re-contextualise information so that their audience can access it. Considering their own needs as an audience for a piece of work can also support them in thinking about the needs of others.

Evaluating and reflecting on audience needs, reliability of information, and suitability of digital technology for the task in hand can be an ongoing process throughout a piece of work. Evaluation that happens at the end of a lesson is useful to support the next piece of work, but students can also be supported to discuss, debate and critically reflect on their work throughout.