

Polar Exploration

SCIENCE & COMPUTING Age 9–11



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Learning Aims:

- To understand how creatures have adapted to their habitats.
- To be able to explain why certain features are crucial to surviving in challenging environments.

CONTEXT

We start every topic with a 'sparkling start' to engage the children; for our 'Explorers' topic, we used the ClassVR headsets to look at different environments to immerse the children in such a way that they could really explore and compare each setting. The children followed the journey of the Nimrod expedition, using the interactive map and using the links to the actual photographs, artefacts and diary entries. Equally, with the Terra Nova expedition story, we were able to captivate their children's interest in comparing Robert Scott's survival kit with that seen by a modern day explorer.

PRACTICAL SESSION



Gentoo Penguins in Antarctica

Linking to our science 'Evolution' topic, we explored the Gentoo penguins project video; this enabled the children to see the penguins in their natural environment and analyse their surroundings, behaviour and habitat. We challenged the children to identify features of the penguins and how these support their habitation in such a cold and tough environment. In addition, we then used CoSpaces to create our own Antarctic world – focusing on the environment features which would be appropriate for this setting and using the coding options to incorporate computing into the science-led topic. The children then created their own creature and added it to the Antarctic setting which they had earlier created. The children were then able to use CoSpaces' share feature and provided collaborative feedback to each other about the science and computing within their projects by viewing and experiencing their worlds and creatures through the ClassVR headsets.

IMPACT ON LEARNING

These resources brought the explorations and expeditions to life for the children and removed many layers of abstraction from their learning to give them a more tangible grasp of these huge, mammoth events. Further to this, the headsets supported children in moving their learning forward by giving them the access to viewing and unpicking environments which they and their peers had created. Their level of enthusiasm, engagement and resilience in this topic was greatly increased and we were very impressed with the children's retention and ability to apply their understanding across the board. The high levels of cognitive engagement and achievement during the topic would not have been possible without these amazing new opportunities provided by the digital technologies.

