

Interconnected Systems

SCIENCE Age 10-11



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Learning Aims:

- To examine how the environment affects the growth, survival and adaptation of living things.
- To define problems and design, modify and follow algorithms to develop solutions.

CONTEXT

Throughout this Year 5 unit of inquiry on 'interconnectedness', students conducted an investigation into living things. They were tasked with the question, How do living things adapt to suit their changing environments? Students began by exploring rainforest biomes and conducting a research project into the different biomes found on the Earth and their similarities and differences. Students researched the human impact on different environments, made future predictions of human impact and explored how animals have adapted.

PRACTICAL SESSION



CoSpaces



ARCube

We explained to the children that they were scientists, interested in the impact humans have on a variety of environments on Earth. They were tasked with researching one particular environment, identifying its key features and classification, and assessing the impact humans have had on that environment over time. We introduced the ARCube and explained to students that they will present their findings through the creation of an interactive ARCube.

CoSpaces was used to design the different perspectives/environments on each of the six sides. Voice overs were used to incorporate English outcomes and sequencing skills. The students followed this broad outline when designing their ARCube: introduction to the rainforest environment, including four biomes and labelled plants and animals; how humans have impacted the rainforest environment; individual research of their own environment (deep sea, coral reefs, deserts etc.), identifying its unique features and outlining why it is important; explaining how the environment has been impacted by humans and/or animals in some way; and finally, students choose one animal that has had to adapt to suit its chosen environment.

IMPACT ON LEARNING

Creating an ARCube engaged all learners, even those with no technological experience! It is a fun, hands-on and interactive platform that allows students to develop and extend their coding skill-base at all levels. It provided students with the opportunity to demonstrate knowledge and understanding at a level appropriate to their needs and is therefore a personalised assessment tool that produced a deeper understanding of content. The impact of utilising Virtual and Augmented Reality in the classroom has contributed to immense student growth in all key learning areas.

