TECHNOLOGY WITH PURPOSE: HOW AR IS TRANSFORMING TEACHING

EASY TO ACCESS AND SIMPLE TO USE, MANY SCHOOLS ARE TURNING TO AUGMENTED REALITY AS PART OF A BROAD AND BALANCED CURRICULUM. TEACHERS AT BEATRIX POTTER SCHOOL IN WANDSWORTH USE DISCOVERY EDUCATION'S IMMERSIVE EXPERIENCES TO BRING AR INTO THE PRIMARY CLASSROOM. HERE THEY SHARE HOW THE TECHNOLOGY ENLIVENS TEACHING AND CREATES NEW DEPTH TO LEARNING.

ENGAGING PUPILS

Year 4 teacher Oliver Woods has been using AR for some time, after recognising its potential to engage young learners. He's impressed by the instant impact AR makes.

"Children naturally love technology, but AR is powerful because it brings objects to life. When we teach with AR our pupils are amazed. It engages them instantly."

DEEPER LEARNING

As well as capturing the imagination, Oliver finds that AR deepens learning. Studying the Romans this term, the children have used Discovery Education's AR resources to invite soldiers, Gods and Emperors into the classroom. The technology brings pupils face to face with 'real-life' characters from Boudicca to Caesar, making ancient history relatable and real.

"AR adds new depth," explains Oliver. *"Pupils can do more with a 3D object because it's interactive and brings the facts to life. It encourages pupils to go further, to ask questions."*

COGNITIVE LOAD

The visual aspect of AR also has real benefits, leaving a lasting impression which helps pupils to grasp and retain information. Beatrix Potter's ICT Lead Andrew Goodgame sees this in action across the school.

"A lot of pupils are visual learners. When I use AR, I find that the children retain information for longer than if they had seen a picture in a book - because the object was actually on the table in front of them."

Headteacher Steph Neale is quick to point out the impact,

"AR revolutionises learning. It changes the whole dynamic of how a child visualises the past, let alone the future."

CROSS CURRICULAR

More than a standalone tech tool, teachers at Beatrix Potter use AR across the curriculum, making links to other subjects.

Recently Oliver Woods used AR as a prompt for extended writing, using Discovery Education's Ballista Challenge resource as a stimulus. The challenge lets children fire a virtual catapult using science and maths to achieve the right angle.

Having practised firing the ballista, Oliver asked pupils to write instructions before completing a 'big write' the following day. The immersive experience helped pupils to extend their learning and approach the task with real enthusiasm.

"AR helps children who struggle with writing. It builds confidence. Because my class had fired the ballista, they were able to make better use of language and were inspired to produce some great writing!"

The ballista lesson also supported STEM learning, as pupils naturally explored gravity, probability and lines of symmetry when considering how best to fire the catapult. ICT Lead Andrew Goodgame says that AR's cycle of repetitive thinking helps children to develop computational thinking skills.

"The visual experience of AR allows pupils to test different theories over and over again without risk. Unlike a physical object, AR leaves no mess. There's nothing to break or reassemble. Children can debug and make adjustments until they get it right. It's a great learning experience."

SOUND PEDAGOGY

Making learning memorable is just part of the appeal of Discovery Education's Immersive Experiences. High quality AR and VR resources take teaching further, applying technology with purpose to deliver sound pedagogical outcomes. Content is carefully designed to help children take on new concepts or to evolve their understanding. Each resource is also closely mapped to the National Curriculum, enabling teachers to embed knowledge alongside wonder and enjoyment, while meeting curriculum goals.

Beatrix Potter Headteacher Steph Neale says that AR has an important role to play in helping schools deliver a broad and balanced curriculum.

"Augmented and virtual reality can revolutionise the way in which primary school children access the curriculum. They have the power to enliven every subject and create amazing learning experiences which inspire young learners."

This is certainly the case at Beatrix Potter. Pupils look forward to immersive lessons and are engaged with subjects they previously found challenging. Steph Neale thinks AR is the reason behind this.

"AR is the pop-up book of the 21st century", explains Steph Neale. *"It brings concepts to life and has the potential to revolutionise the curriculum, enlivening subjects and creating amazing learning experiences. Put simply, it's the future."*

Immersive experiences are now available within Discovery Education Espresso.

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