

Physicsy stuff

Hi, and welcome to issue 172. The theme of this issue is 'Physicsy stuff', and it represents a journey far and wide in the teaching of all things physics – or at least as much as can be covered in a single issue. It is well known that, within primary science, teaching in the field of physics is often met with a certain heightened degree of angst. This reputation is, however, not at all well deserved. Physics can, as many of the articles in this issue attest, be engaging, humorous and even – dare I say it – fun!

In our 'In conversation with ...' piece in this issue, Paul Chambers speaks with eminent physicist Professor Martin Hendry. One of the esteemed team that has catalogued over 90 gravitational wave detections to date, he is without doubt one of the most eminent scientists ever to appear within the pages of *Primary Science*. So to whom does he attribute his love of science and physics? His teachers! A keen proponent of authentic scientific study with children, Martin also outlines his belief in the power of academic outreach programmes in schools as well as community involvement. This is a truly fascinating insight into the influence early science experiences had on one of our greatest scientists – and a genuinely enthusing read for any teacher of primary science.

Influencing children to love physics early in their school careers is also evident in Rachel Linfield and Erin Ireland's work on teaching creatively in the early stages. The activities described in this article are sure to engage children (and their teachers) as they are encouraged to explore the physics of sound through being creative. Community involvement and using physics to build science capital is highlighted by Emma Crisell in discussing her school's involvement with the Ogden Trust. In another enthralling read, Emma explores how this partnership working led to some substantial changes, not only in lesson provision, but also in changing parental

attitudes to science study generally. Key to success here was the support expertise in physics concepts offered. With this broad idea in mind, our regular *Science Swap Shop* insert in this issue offers several easily replicated physics experiments for all age groups in primary.

Welcome expertise in explaining the finer points of physics concepts, ideas for experimentation and investigation, is also offered by Paul Chambers and Ben Rogers in this issue. Dealing with notions of charge and forces, their articles not only give the granular insight that is often very much needed when teaching physics to enquiring young children, but there is also the comfort of detailed exemplification of actual lesson content.

Having journeyed through all stages of the primary school across the UK, this issue takes an international detour for the first time in many issues. Looking at work from primary schools in Greece, Theodoros Pierratos and Panagiotis Koumaras investigate defined pedagogy and child engagement in the use of pre-recorded experiments in the classroom. With even further

flung journeys in mind, Ciaran Fairhurst and our very own Paul Tyler take us into the wonder and awe of space to explore the James Webb Space Telescope. I think you will agree that the content and beautiful images in this article are literally 'out of this world'. Staying on the theme of space, Sarah Dyer and Cerian Angharad describe an inspiring school visit by astronaut Tim Peake.

So, from international academia to the earliest years in primary, from UK to European schools and from fine detail of physics concepts to 'infinity and beyond', this issue of *Primary Science* has a little something for everyone: 'Physicsy stuff' in an easily digestible and inspiring format as you might say!

I hope you enjoy Issue 172!

Robert Collins

'Physicsy stuff'
in an easily
digestible and
inspiring format