FOCUS on...

Nature of science

s I pen this *Focus on...* piece, my overriding emotion is how wonderful it is to once again be involved with producing *Primary Science* after many years! Having been a member of the editorial board from 2005 to 2014, it is great to be back working with everyone at the journal and to have the opportunity to engage again with its committed readership. I am absolutely delighted to be the journal's new editor and, as a regular subscriber to *Primary Science* like you, I would like to thank our retiring editor Leigh Hoath for doing

such an excellent job and wish her every good fortune for the future. Her help and guidance to the whole team has been phenomenal over the years of her editorial tenure, and her support with organising this issue as I re-found my editorial feet, so to speak, has been most appreciated.

The theme for this issue is 'nature of science'. As Professor Brad Gibson mentions in our regular 'In conversation with ...' piece in this issue, there has never been a more important time for primary science. Schools, he postulates, are key to counterbalancing all the pseudoscience children may have encountered virtually during

the recent pandemic. Teachers re-establishing sound real-world science skills with their pupils, as well as reinvigorating the wonder and awe of the natural universe in young minds, is crucial to success with this task. It is also crucial in ultimately supporting pupils' wider scientific attainment. This interview with Professor Gibson is refreshing and his enthusiasm for primary science is palpable. I personally found his message of hope for the future just the tonic required at this really significant time for primary science education. I hope you do too.

No science journal focusing on the natural world would be complete without a mention of Charles Darwin. With this in mind, in this issue Verity Jones, who is also a welcome recent addition to the *Primary Science* editorial board, offers very interesting insights into her work with the Darwin Experience in Wales. She shows how shared values between pupils, teachers, education providers and science institutions can positively affect efficacy and subject matter confidence. These acquisitions extend to both pupils and practitioners.

Then, in a piece that I am sure Darwin himself would also have shared interest, Laura Hackett and Sherry Simpson go on to investigate the actual nature of children's scientific understanding though discussion on a unique approach to enhancing pupils' substantive knowledge. Together with fostering what they identify as children's

epistemic insight in science, they also provide suggestions for how science lessons may more naturally evolve into authentic interdisciplinary work through joint inquiry encompassing moral and ethical considerations.

With a more distinct integration across science subjects firmly in mind, Andy Markwick and Amy White revisit a familiar classic and give it a thoroughly new twist. This is done in terms of supplying new insights into both the breadth and depth to which a primary classroom favourite can be put. Spanning biology, chemistry and physics concepts, their reworking of experimentation using fruit and vegetables to generate

electrical energy is at once detailed and a must-read for anyone wishing to progress work using readily available natural resources.

Also in this issue, Matt Clark explains the benefits of using nature and the natural environment to promote learning. This is reported through his work with Nature Friendly Schools. This outdoor learning approach has clearly inspired Matt, especially as regards his passion towards work on greening school grounds. It provides a very enjoyable read for those engaged and committed to outdoor learning with young children in science. Insightful and thought provoking too. Such is the nature of science!

I hope you enjoy this issue.

Robert Collins