

## Technology and science

**T**hings change ... far too quickly! My grandfather described his life from when he started work on a farm using a horse to pull a plough, through the modernisation of agriculture to when there was a man landing on the Moon. He said he could not have imagined such progress in one man's lifetime. In this issue of *Primary Science*, we read of Rory Galloway using technology to support his work as an agronomist, including a drone to help manage crops. I wonder what my grandfather would have made of that!

I am in awe of science and technology: I am so impressed with the advances that we see in the modern world, although in some ways I have come to expect them. It makes me wonder what it would take to be really 'wowed' by the next steps in invention and progress: something beyond my imagination as the Moon landing was for my older relatives.

Science can solve a lot of the world's problems; not all, but it is certainly on the way. Technology and medicine, communications, space exploration and many other areas of life we know more about than ever before. Arguably it has created problems too. Plastics were once a fabulous commodity and are now a major cause of concern.

Some of the top current technology trends include artificial intelligence, virtual reality, augmented reality and cybersecurity. The number of jobs in cybersecurity is growing three times faster than any other technology-based job (many of which have a six-figure salary so just slightly more than a teacher!). This begs the question of how we really prepare children for a future that is growing in such ways so quickly.

We know that the curriculum will always lag behind the 'real' science and technology in society, which is why ensuring children are being taught the skills around working scientifically and enquiry is paramount. There

is a great deal of evidence suggesting that scientists have worked with the same methods and principles for hundreds of years. I am sure most would agree that we should aim for a scientifically literate population, where people are making more informed decisions. However, asking people who are not scientists to think like scientists and understand some of the knowledge needed to make such decisions might be a big ask. The conundrum we face is ensuring children are taught the science they need to form a literate society, while the science is running

away from them with the speed of progress. In spite of this, it is still most definitely worth the effort!

This issue of *Primary Science* presents a range of articles considering technology in science, including the importance of design in D&T, incorporating engineering in the curriculum, using online games, technology in farming, how technology can support exploring the natural world and the use of mobile technology and apps in teaching science in the outdoors. There are practical ideas and thought-provoking comments throughout, all aimed at supporting your practice in schools.

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The children now in primary schools are the ones who will be doing the jobs in cybersecurity, who will be helping to solve the next world crisis and inventing the next fabulous lifestyle aide. You as a teacher are playing a part in that and if you are inspiring and engaging them with meaningful science then you are playing a *big* part! I don't know how we ensure that children are prepared for what is to come in terms of science and technology, but I do know that part of the answer lies in helping them to see the value of science and its importance for the future of our society.

**Leigh Hoath**