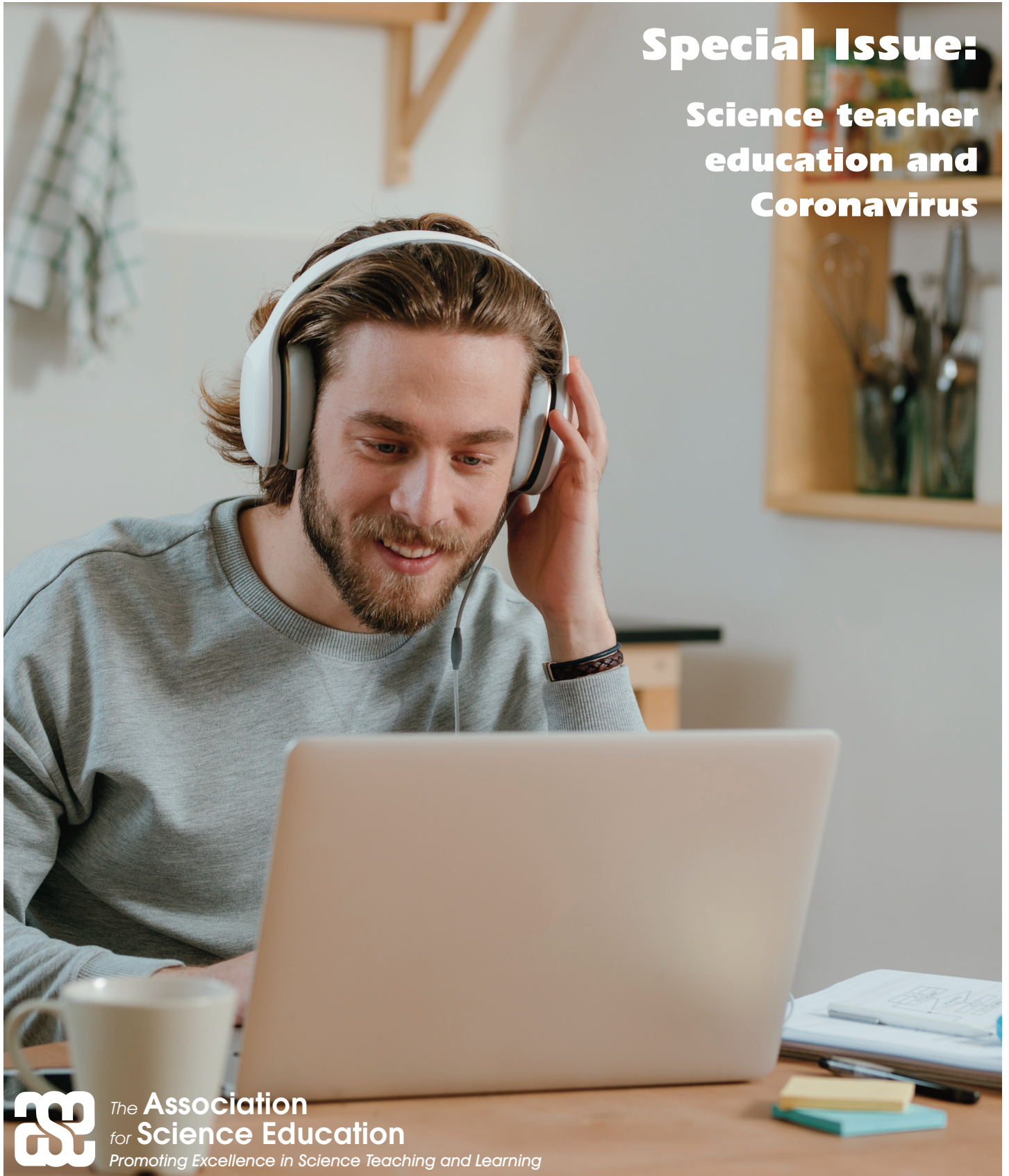


Science Teacher Education

No 87 • June 2020

Special Issue:
**Science teacher
education and
Coronavirus**



The Association
for Science Education
Promoting Excellence in Science Teaching and Learning

An ASE publication for all concerned with the pre-service education, induction and professional development of science teachers

Science Teacher Education

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Interim Editors: **Jane Turner and Alex Sinclair**
j.turner@herts.ac.uk
alex.sinclair@stmarys.ac.uk

Executive Editor: **Jane Harrott**
janeharrott@ase.org.uk

Editorial Board: **Linda Scott**
Senior Lecturer,
University of Worcester
l.scott@worc.ac.uk
Research Roundup

Morag Findlay
University of Strathclyde
Morag.findlay@strath.ac.uk
Scotland, Wales and
N. Ireland issues

Caro Garrett
PGCE Lead Science Tutor
University of Southampton
C.Garrett@soton.ac.uk
ASE Futures Group news

Helen Clarke
University of Winchester
helen.clarke@winchester.ac.uk
Research Roundup

Julie Jordan
Sheffield Hallam University
Articles

Jon Heywood
University of Leicester
Articles

Kelly Davis
Plymouth University
Articles








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Science Education,
College Lane,
Hatfield, Herts AL10 9AA.
Tel: 01707 283000
Fax: 01707 266532
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Special Issue: Science teacher education and Coronavirus

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Editorial

● Jane Turner ● Alex Sinclair

Since lockdown on March 23rd, we have become used to seeing scientists on our TV screens every day; to reading newspaper headlines telling us that our government is 'following the science'; and to hearing debates about the merits of theoretical and empirical science on radio and podcasts. Epidemiology and virology are part of the nation's vocabulary, and the nature of science is a regular topic of parliamentary and popular debate. At the same time, we follow the rules of lockdown, and 'coming out of lockdown', applying scientific understanding about the spread of disease to the way we lead our daily lives. Arguably, the value and importance of science education has never been higher or more visible.

This special issue of *STE*, produced during the lockdown imposed as a result of the Coronavirus pandemic, focuses on the issues faced by teacher educators. School and university closures have had enormous impact on the professional and personal lives of ASE Futures members this spring and summer, and this issue documents some of these impacts and also considers the longer-term implications for teacher education in the UK. As Interim Editors of *STE*, we wanted to share the experience, expertise and thoughts of members, and we are grateful to the contributors to this special issue who found time in the challenging weeks following lockdown to complete surveys, talk to us and write articles. This is a less formal journal than usual, but we hope that it will be of topical interest to readers. It clearly shows the coherence and collegiality of the Futures community, and its impressive professional commitment to ensuring that teachers and trainees receive the very best professional learning in science, in what we all now recognise as 'unprecedented times'.

The first two articles are reports of surveys. The first, compiled by Alex Sinclair, summarises the challenges expressed by 29 ASE Futures members

immediately after lockdown and since, and their thoughts about the future of teacher education. The second, written by Chris Shepherd and Claire Aspinall from the Institute of Physics, is 'hot off the press' and provides a brief summary of views of tutors about the threat to Initial Teacher Education (ITE).

Following these are five reports of interviews with ITE and CPD professionals, carried out by the Editors. The interviews vividly illustrate many of the issues raised by the survey respondents. James de Winter, Morag Findlay and Judith Hillier talk about the challenges faced by PGCE tutors, and Deborah Herridge relates her experience teaching primary science to undergraduates during lockdown. Kulvinder Johal supports primary science subject leaders and her interview reveals the demands on primary teachers. All interviewees offer insights into the possible long-term impacts on science teacher education.

Finally, there are two articles sharing ideas for teaching strategies and resources when face-to-face teaching is not possible. Former ATSE Chair, Keith Ross, discusses the use of a set of online videos focusing on the chemistry of climate change and the carbon cycle, and lecturer in primary science education, Ruth Coakley, considers the use of flipped and online classrooms.

If this special issue has whetted your appetite for sharing your experience and expertise with other teacher educators, then please consider writing an article for a future issue of *STE*. Articles should focus on pedagogy and professional learning in science education and be between 1500 and 2500 words. *STE* is the journal for ASE Futures members and those in the research community, and welcomes contributions from university tutors, education consultants and local authority staff, researchers, Heads of Science and leaders responsible for CPD.





Editorial

● Jane Turner ● Alex Sinclair

Another forum for sharing expertise and enthusiasm for science teacher education is the ASE Futures Conference, taking place online this year, on 2nd and 3rd July. There is the usual full programme of high quality presentations and debate, led by external speakers and Futures members. Ticket prices start at £30 for a single day. The outline programme is also featured in this edition of *STE*, on page 34.

Dr. Alex Sinclair, St Mary's University.

E-mail: alex.sinclair@stmarys.ac.uk

Associate Professor Jane Turner,

University of Hertfordshire.

E-mail: j.turner@herts.ac.uk

Interim Editors of *STE*.

