BOOK REVIEWS

EXPLAINING PRIMARY SCIENCE

Reviewed by Sheeba Viswarajan, University of East London Authors: Nicholas Souter and Paul Cham London: Sage, 2017 ISBN: 978-1-473-91279-3

Explaining Primary Science by Souter and Chambers is essentially a subject knowledge booster guide to teach science at primary school level. As the title suggests, the authors explain the content of Primary Science, which will enable teachers to meet the requirements of the curriculum.

There are 19 chapters in this book, each of which covers an essential aspect of the Primary Science curriculum. Each chapter includes an overview of how children might view the concept presented in the chapter, and offers suggestions on effective teaching approaches. This book is accessible for the non-specialist, it is easy to navigate to the different sections and although not as richly illustrated as other Primary Science textbooks, the images are well chosen and support the text. All chapters come with suggestions of classroom activities which can be easily carried out in primary classrooms. Primary trainee teachers can use these classroom activities to develop and strengthen their pedagogy, thereby gaining confidence in teaching abstract concepts of science to young children. This book will encourage teachers to understand the topics in greater depth and will enable them to have the confidence to teach the topic in a knowledgeable manner. It would have

been useful if, for each chapter, there had been a section on recommended strategies to tackle and dispel misconceptions.

The book has a companion website, hosted by Sage publishing, which is freely accessible using the provided web address. This website includes videos to support certain experiments in the book. This website is particularly useful for non-science specialists, who can gain deeper understanding of the experimental method by watching the videos.

There are interesting examples and real-life applications included in the chapters, which will enhance teachers' subject knowledge. For example, in the 'Types of matter' chapter, explanation about incompressibility of liquids is linked to the principle of hydraulics, so a teacher, while explaining this concept, can refer to its real-life applications in hydraulic car jacks or car braking systems. This book extends understanding of the concepts, and hence teachers will find themselves well prepared to answer curious students' questions. Secondary trainee teachers could also refer to this book to understand the breadth of the primary school curriculum. This understanding will help them to cater to the needs of their Year 7 learners who will have

been studying these topics in their primary schools.

The book also provides a useful mapping of the chapter contents to the statutory requirements of the National Curriculum in England and the Curriculum for Excellence in Scotland. This mapping makes it easy to locate not just those chapters that provide extensive coverage of a particular topic but also others that have some reference to it.

The reflection points at the end of each chapter help to consolidate the understanding and consider the implications of teaching a topic to young children. There are a few references to health and safety but not for the experiments and demonstrations included in the chapters. Risk assessments of science experiments would have been helpful for trainees or teachers, especially nonspecialists who have less experience dealing with the health and safety of chemicals.

Overall this is a helpful 'one-stop' subject knowledge booster book, especially for those who are training to teach in primary schools. This book will be a useful addition to the Primary Science reading list and I would recommend it heartily.