

BOOK REVIEWS

EXPLAINING PRIMARY SCIENCE

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Authors: Nicholas Souter and
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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 non-specialists 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. ■

EFFECTIVE PERSONAL TUTORING IN HIGHER EDUCATION

Reviewed by Liz Gregory

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This new text is a welcome addition to discourses around the role of the personal tutor, and the value that a skilled tutor can add to the student experience through effective support, coaching and mentoring within a higher education setting. The growing interest in the role played by personal tutors across all levels of education reflects the move towards more student-centred forms of learning, with institutions increasingly taking a more holistic approach to supporting learners through all aspects of their educational experience (see, for example, McIntosh (2016), drawing upon Kift's (2015) 'whole of institution' approach). The role of a personal tutor is not easily defined, however, with the authors acknowledging that the term is likely to cover 'all activities where academic or professional staff work in partnership with students to provide one-to-one support, advice and guidance, of either an academic or pastoral nature' (p. 2).

The authors have all written on the responsibilities inherent in this role before; indeed, this new book adopts the same format and structure as Stork & Walker's (2015) text on personal tutoring in a further education context. Their co-authors are equally well placed to discuss the importance of the tutor role: Lochtie is chair of the Professional Development Committee for UK Advising and Tutoring (UKAT), and McIntosh has written widely about the student lifecycle and how best to support individuals through the transitions that form part and parcel of that journey. The authors' wealth of hands-on experience is reflected in the practical nature of the book: it is easy to dip into, and examples and case studies are closely linked to concrete situations a personal tutor is likely to encounter in their daily practice. As the authors point out, for the new or pre-service teacher, 'personal

tutoring, coaching and student-centred pedagogy are areas that are implicit within your qualification' (p. 7), and yet the considerable range of skills needed by a personal tutor are unlikely to have been covered in any depth during the course itself. According to the second chapter of the book, these core skills can be divided into domain-general and domain-specific, and then further subdivided into 'hard' and 'soft' skills; an example of a 'hard' skill might be effective curriculum planning, whilst building rapport with students would be considered 'soft'. The book pays more attention to the development of these 'soft' skills, a reasonable focus in view of the fact these skills are considered harder to teach and must be developed throughout one's career rather than neatly delivered during a teaching qualification.

The book presents nine chapters in all, covering key aspects of the tutoring role. The first two chapters attempt to establish what is meant by the term 'personal tutor' and the core skills and values needed to succeed in such a role, with chapter 3 (setting boundaries), chapter 4 (identifying student populations, such as those at risk), chapter 5 (supporting learners at all stages of their student lifecycle) and chapter 6 (use of solution-focused coaching to support students) all focusing on different elements of classroom practice. The final three chapters then encourage readers to adopt a reflective approach to developing their practice, understand how to measure the impact of their role, and consider some next steps both for themselves and their institution. Each of these chapters follows a similar format, setting clear learning objectives before exploring the chapter's topic first from a theoretical perspective and then through 'critical thinking activities' designed to help the reader

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apply theory to their own practice.

On the whole, this is an effective structure. The text uses case studies to illustrate the kinds of conversations that may take place with students, followed by discussion of the strengths and weaknesses displayed by the tutor in each scenario. Each chapter finishes with a brief summary, a learning checklist, a list of critical reflections for the reader to consider with regard to their own practice, and a helpful list of references for further reading. This approach makes the book highly user-friendly, although sometimes the reader may feel that items on learning checklists such as 'I understand that in order for the learning from the book to become embedded, I need to take ownership' (chapter 9, p. 216) push the point too far. However, the thorough consideration of underpinning ideas and theories means this this new volume will be of use to even the most experienced of tutors. Whilst the book is not explicitly aimed at teacher educators, this is a valuable text for those for whom tutoring responsibilities are twofold: not only must teacher educators fulfil their own responsibilities in providing support and guidance, they must also ensure pre-service teachers are developing the skills they need in their future careers. ■

REFERENCES

- Kift, S. (2015). 'Transition Pedagogy: a whole student, whole-of-institution framework for successful student transitions', *International Conference on Enhancement & Innovation in Higher Education*, Available online at: https://www.jcu.edu.au/_data/assets/pdf_file/0019/123913/jcu_082698.pdf
- McIntosh, E. (2016) 'Ideas, concerns and expectations – a "whole of institution" approach to navigating transitions and mapping the student journey'. *Paper presented at the Student Transition, Achievement, Retention & Success (STARS) Conference*, Perth, Australia.
- Stork, A. & Walker, B. (2015). *Effective personal tutoring in further education*. St Albans: Critical Publishing.