Developing Subject Knowledge in Design and Technology: Developing, Planning and Communicating Ideas
Reviewed by Alison Hardy, Head of Technology, Lodge Park Technology College

This book is written with the aim of developing a teacher's subject knowledge in the aspect of design, primarily through looking at the work of professional designers in industry. It is a set text for a course run by the Open University and has been awarded the Teacher Training Agency kite mark. With these recommendations and acknowledgments I was expecting a book that would add value to my own design and technology teaching, making my subject knowledge more relevant and alive in terms of ‘design’. I was to be left dissatisfied at the end of the book.

It is part of a series containing four books that will give “inspiration and support needed to deliver” the design and technology orders successful (the comment is taken from the blurb on the back of the book).

The text is divided into five sections:
• Starting to Design
• Designing
• Creativity in Design
• Designing for Manufacture
• Evaluating Designs

Each section begins with a brief explanation of what will be covered, including activities and questions that aim to develop an understanding of the topic. Some of the activities are useful and I plan on using them with my four new teachers.

The first topic, ‘Starting to design’ discusses what is meant by design and why new designs are needed. It also includes some basic information about what a design brief and specification is.

‘Designing’ investigates the process of design and the factors a designer needs to consider. Within this chapter the author mentions ‘green design’, an area that other books forget to point out as an issue for designers. Some terminology that I would expect to hear in a classroom is brought up but not always explained fully. There are new phrases that I had never heard of before (AIO research) which caught my eye and I will look to bring these into some of my own teaching.

The third topic ‘Creativity in Design’ was presented in a very dry fashion; this is an enlivening topic about which design and technology teachers can become quite passionate - where was the passion? Some creativity techniques are touched upon but visual explanation was needed in one or two places.

In the fourth section manufacturing was considered. I was surprised to see this topic covered in a book like this particularly when I read it. In places it becomes a school textbook, giving information about classes of materials, properties of materials and production levels. (N.B. the book tends to use resistant materials as its focus with occasional reference to textiles). This was not the place for this information as this is covered in more depth and better in other books. Once I had read the chapter I could see the relevance of the topic. Pupils find it hard to consider the parameters that arise in manufacturing a product when designing; this book does try and develop that as important factor that a teacher needs to implant in a pupil’s design development.

The final topic ‘Evaluating designs’ includes detail about the main methods used in schools. However the main method used by pupils, evaluation against the specification, was only discussed briefly.

I am concerned that the language used in this book is inconsistent in places with what a student teacher may hear in a D & T department. Throughout the book I expected to see more reference to existing texts that are used in school departments so as to ensure that the terminology is not confusing to either the student teacher or the class they will be teaching (e.g. Nuffield, QCA Schemes of Work).

Would I encourage student teachers to use this book? If they had to use it as part of their course I would do so, otherwise I would promote use of it with caution. Some of the content is very informative but it presents an exciting topic in an uninspiring fashion.