

TTS Resources on Mechanisms – Simple Mechanisms Book and Workcards

Reviewed by Judith Holmes, Subject Manager for Design and Technology, Balsall Common Primary School

Simple Mechanisms focused practical tasks: Teacher's book No. 1

This book supports the pupil materials, which come in the form of cards. It is very clear and concise, the text is easy to read and understand, and diagrams are clearly labelled. As a subject manager for design and technology, I found it extremely useful as it gives good advice about resourcing, pointing out pit falls and thus avoiding unnecessary expense. The focused practical tasks suggested are equally as useful, especially as once again it points out possible problems and how to overcome them. The clarity of the text means that it makes sense to even the most inexperienced at design and technology and doesn't put them off with complicated text. At the back is a glossary, which clearly shows the technical language appropriate for each key stage backed up by well-worded definitions that the children can understand. I thoroughly recommend this resource.

Simple Mechanisms Workcards

The front of the cards are bright and attractive with clear diagrams to illustrate and explain the mechanism. The reverse of the card gives ideas for the children to try out as well as handy tips. We have used the cards not so much as individual activities, but rather as reference materials which have been displayed centrally. Staff have found them as useful as the mechanisms are explained in laymen's terms and therefore make more sense! We have found the cards on pulleys, cams and levers the most useful as we have used them in conjunction with QCA units Winding Up, Fairground Rides, Story

Books, and Moving Toys. Although some of the cards can be used with Key Stage 1 they are weighted most heavily in favour of Key Stage 2 and it would be helpful if a similar pack could be produced with Key Stage 1 in mind, including wheels, axels and hinges.

Board with Pulleys

I have to say, this is a resource I had not already purchased as I was dubious about incurring expense when a piece of wood, nails and cotton reels would do the job. I have, however, found it more useful than I anticipated, but with some reservations. My Year 2 class found it fascinating and played with it as part of their product analysis on pulleys, in preparation for their winding up toys. The board provoked much discussion between pairs of children when using it and I would use it again in this way. When it came to Year 6 Fairground Rides, I found it a useful addition to the cotton reels rather than a substitute and found it helped clarify things for the children. It was useful for fault finding, for example, when a group's fairground horses were going the wrong way round. With reference to the board, the children could quickly see that if they were to twist the elastic bands it would change the direction in which the ride turned. My reservations are to do firstly with its durability, as very quickly one of the pulleys fell off even though it had not been treated roughly in any way. My other point is not so much a reservation as a suggestion that it would be useful to have some labelling such as 'pulley', 'drive belt' and 'follower' etc.

To summarise, I have found it a very useful resource and am grateful for the opportunity to have tried it. It will never end up at the back of a cupboard and will continue to be put to good use. I would recommend it to other teachers if they could include it in their budget.

TTS resources on mechanisms – Simple Mechanisms Books and Workcards

TTS Group: £23.50

Code: TWK005

Orders: 0800 318 686

Appropriate content	////	Generic use
Pupil/student use	////	One of a series
Teacher resource	///	Photocopiable
Visuals	////	Pupil/student activities
Overall style	///	Cross-curricular

Primary Design and Technology for the Future: Creativity, Culture and Citizenship

Reviewed by Alan Cross, Lecturer in Education, Manchester University

How refreshing to read a book which steps back from the minutia of planning and teaching of the National Curriculum (DfEE/QCA, 1999) or the Literacy and Numeracy Strategies to take a broader view. This book reminds us that education is about the big things, about pupils taking their place in the world and in their lives, making myriads of small decisions which together with those of others will have lasting effects on our planet.

In this thought provoking book, Alan Howe, Dan Davies and Ron Ritchie make an excellent case for the creative teaching of design and technology. They say that this might be different to what is sometimes referred to (and one might note, rarely defined) as effective teaching of the subject. They point to a number of ways in which the subject can be approached in the primary school which would take the teacher, and more importantly the children, beyond the present confines of QCA/DfEE (1998) Scheme of Work for design and technology and promote creativity, consideration of culture and citizenship.

The authoring team demonstrate commensurate understanding of primary design and technology and the issues surrounding creativity, culture and citizenship. The relevance of the book is enhanced by its consistent reference to writing, including the National Curriculum (DfEE/QCA, 1999) and recent reports. This contemporary feel will make it meaningful to its audience but may affect the longevity of the book. The authors may inevitably have to review the book earlier than they otherwise might. This may be a consequence of

writing in an area which will continue to develop.

The book is well written and organised to assist the reader with short chapters, each of which is preceded by a statement of purpose and is concluded with a useful summary. A feature of particular value to teacher readers are the short, illustrative case studies, which are used carefully, and which contribute to the meaning conveyed by the sections within the book. The diagrams and photographs add to the visual impact and ought perhaps to feature a little more. Children's two-dimensional and three-dimensional work is illustrated. I suspect that many readers would find a little more of this material very useful. The book, however, represents very good value for money.

The authors take creativity, culture and citizenship in turn and examine current and past thinking about their definition and relevance to design and technology. A compelling case is made for creativity in the teaching of this subject. Their view is that creativity is something which the subject teacher must actively pursue – creativity is seen as being at the heart of design and technology. This includes short consideration of aspects such as imagination and originality. These are not necessarily concepts that teachers will have given much time to but ones which have great bearing on this and all other subjects. A good example in their consideration of originality is the distinction they refer to between originality to the individual, originality in relation to one's peer group and historic or unique originality. The point being that we refer to originality more often in the latter sense but that as educationalists we should recognise all three.

Culture is viewed from a stance of design and technology's links, historically and presently, with aspects of the arts and of science. Both are dealt with in a pragmatic way. Clear reference is made to the current version of the National Curriculum and recent QCA and other reports. Importantly, as with other sections of the book, the authors discuss alternative approaches and their consequences for design and technology e.g. is design and technology independent of science? Does one proceed the other? Do they interact?

The relationship between citizenship and design and technology is strongly stated. The discussion, whilst short, discusses the significance of design and technology to

any member of a society in that for any citizen to function as such, he or she must employ skills and attitudes developed by design and technology education.

A number of themes are developed in the book. The authors demonstrate a good understanding of values and their importance to the subject and to the other themes of this book. Teachers are asked to engage children in such considerations, for example, are rainforests as important, more important or less important than being able to travel in aeroplanes? The notion of sustainability is raised, what it means, what it might mean.

This book should appeal to a number of audiences; those interested in the teaching of design and technology in the primary years and those interested in creativity, culture and citizenship. It is highly relevant to those training teachers and to those developing policy with or in schools.

The book reaffirms the cross-curricular nature of design and technology with strong links between design and technology and other subjects, in particular the arts and with environmental education.

This is a book for those interested in design and technology in primary education and for those interested in creativity, culture and citizenship and how they apply to curriculum subjects. Design and technology as a curricular subject is an excellent example, illustrating many of the dilemmas facing primary teachers, e.g. ways to adapt existing topics to exploit cross-curricular links.

Design and technology has developed rapidly as a subject since its birth in 1990. There will be a need for careful review as we shape it for the early part of the 21st Century. The more we can engage fellow primary educationalists in a discussion of its nature and shape in schools, the more optimistic we can be about the subject's future. This book makes an excellent contribution suggesting that a key part of the future of design and technology should be consideration of the future in which our young people will spend their lives.

Primary Design and Technology for the Future: Creativity, Culture and Citizenship

Alan Howe, Dan Davies and Ron Ritchie
David Fulton Publishers: £15.00
ISBN: 1 85346 738 3
Orders: www.fultonbooks.co.uk

Appropriate content	////	Generic use	⇒
Pupil/student use	n/a	One of a series	
Teacher resource	////	Photocopiable	
Visuals	////	Pupil/student activities	⇒
Overall style	////	Cross-curricular	⇒

Teaching Design and Technology in Secondary Schools – A Reader

Reviewed by John Durrell, Design and Technology department, University of Greenwich

This book is primarily intended as a reader for ITT students following the Open University's flexible PGCE course in design and technology. However, the book would also be very useful for any other design and technology teacher training student or newly qualified teacher. It has a wealth of very useful, well written material, which has been gathered from a wide range of perspectives.

This review is of the paperback version, which is just over A5 in format and costs £18.99. It is one of a series published by the OU in relation to initial teacher training and is edited by Gwyneth Owen-Jackson, the course leader for the OU's flexible learning design and technology PGCE.

The book is a collection of 22 papers from a range of authors. Some are design and technology educators, while others are from diverse backgrounds such as design or industry. Although many of the papers found in the book can be sourced from elsewhere, some have been specifically commissioned for the book, while others have been updated either by the original author, or by Owen-Jackson. Some of the papers have been compiled and focused to provide insights of a selected topic from various points of view. Owen-Jackson suggests that these papers be read in conjunction to gain a broad overview of the topic.

The 22 papers are divided into sections as follows:

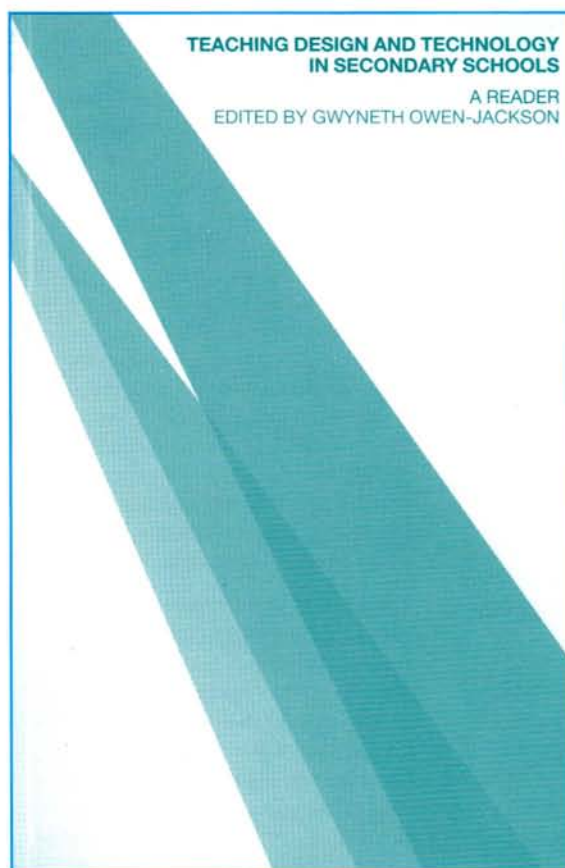
Section 1 – Design and technology in the curriculum – 5 papers

Section 2 – Issues in teaching and learning design and technology – 8 papers

Teaching Design and Technology in Secondary Schools – A Reader

Edited by Gwyneth Owen-Jackson
Routledge Falmer: £18.99
ISBN: 0 4152 6073 6
Orders: www.routledgefalmer.com

Appropriate content	////	Generic use	
Pupil/student use	n/a	One of a series	←
Teacher resource	///	Photocopiable	
Visuals	////	Pupil/student activities	n/a
Overall style	////	Cross-curricular	n/a



Section 3 – Assessing learning – 2 papers

Section 4 – Social and contextual issues – 5 papers

Section 5 – Teacher learning – 2 papers.

Each of the sections has a clearly presented range of papers, mainly from authors well known in the area of design and technology. These papers outline the development of design and technology from inception through to its current development, viewed from a variety of perspectives.

The book details a range of papers covering the broad areas of technology, and also highlights the development of design and technology as a school curriculum area. It outlines current issues and proceeds to consider how the subject interacts with other curriculum areas, and its broader links with industry and the world of work. The book also uses perspectives from designers (who are not school focused) to examine how the focus on the designing activity may vary depending on the context – school or industry focused.

Although the book's introduction makes it clear that it is intended for those teaching in secondary school, it uses materials

from a range of sources to give a broad view. This view does not only concern design and technology in school, but also allows the reader to understand the place of design and technology in relation to the wider society.

As a teacher educator, I will find this book a useful reader for my ITT students as it is thought provoking and I am sure will stimulate discussion.

Overall, the book is well presented and is clearly a good buy, particularly for trainee teachers. It gives a range of views about design and technology as a starting point for further study, with the editor providing a useful preface to each paper.

Aspects of Teaching Secondary Design and Technology – Perspectives on Practice

*Reviewed by David Spendlove,
Senior Lecturer in Design and
Technology Education, Liverpool John
Moore's University*

This is one of a series of books produced as part of an attempt to bring together 'a range of new thinking' about teaching and learning within design and technology. The book is specifically aimed with the needs of initial teacher training (ITT) programmes in mind. However, the book has wider appeal and would prove useful for all design and technology teachers.

Not all the material in the book is new. Sixteen of the 25 chapters are reproduced from other publications with nine of the chapters being taken from previous DATA Journals. However, some of this material has been updated from the original source and the fact the material is reproduced does not detract from the quality of the material or from the new chapters within the publication.

The book is divided into four sections looking at design and technology in the curriculum, in the classroom, wider school issues and the community. This means that an enormous amount of material can be included and although this is not always consistent in its message (not that it necessarily should be considering the diversity of material), it provides a real opportunity for those new to the subject to get to grips with design and technology within the confines of a single publication. This is helped as the emphasis throughout the book is very much based upon classroom practice rather than wider contemporary issues (covered in a companion volume) and this will widen its appeal to existing teachers as well as trainee teachers.

For ITT students this book will prove very useful. Along with the other books in the series, it will provide an essential collection of information for which to try and grasp the enormous and complex range of issues involved in the teaching and delivering design and technology.

Aspects of Teaching Secondary Design and Technology – Perspectives on Practice

Gwyneth Owen-Jackson et al
Routledge Falmer: £18.99
ISBN: 0415 26083 3
Orders: www.routledgefalmer.com

Appropriate content	////	Generic use	n/a
Pupil/student use	n/a	One of a series	no
Teacher resource	////	Photocopiable	
Visuals	n/a	Pupil/student activities	
Overall style	////	Cross-curricular	

Design and Make It! Textiles Technology (Revised Edition)

Reviewed by Gilly Dobson, Head of Textiles, The Nelson Thomlinson School, Wigan

This is the revised edition of the book published in 1997 that was originally written to support the new GCSE design and technology courses in textiles technology at Key Stage 4.

Like the original version, this is a soft-backed resource (which pupils are advised to cover or strengthen). All pages have full colour illustrations and photographs, which make it both visually appealing to pupils and easy to follow (they are often spotted flicking through the pages to peruse the illustrations).

The book does not cover every aspect of textiles technology that a GCSE candidate might need to know. There are no detailed explanations of how to achieve various textile techniques, for example, silk painting or use of CAD, but it is a sound support for them and covers various aspects of GCSE coursework and theory. The exemplar exam question papers included in the book are also very useful and have been completely updated and rewritten to bring them more in line with the new GCSE specifications.

The new introduction covers social, moral and environmental issues and is followed by a new, short section on ICT in the textiles industry and also the use of ICT in GCSE textiles technology. These new pages, which total eight in all, are the only completely new addition to the book but some others (about 26 or so) have been updated and improved. In particular, the 'Project Guide' section has been revised and is as useful but clearer than its predecessor in guiding pupils through the various stages of their project folder work.

The rest of the book covers three exemplar projects, which are used as a



vehicle to present other topics and theory work. These have changed very little and whether a teacher chooses to follow these would be their choice. Each of these projects has a different bias. The first has a theatrical base for designing a stage costume or decorative fabric. The second has a sport and leisurewear theme, where pupils can design and make a bag or garment. In the last project, pupils can design fabrics for the interior of a cruise liner or uniforms for its staff on board. These projects have not grabbed my pupils' imaginations greatly in the past. Financing and sourcing appropriate fabrics for the projects could be costly, either for the technology department in school or for the pupils. However, these projects could be adapted i.e. change the theme or choice of item to make them more appealing to the pupils.

Various aspects of textiles such as fibre information, fabric testing, fabric decoration and CAD/CAM are covered within these projects and are presented with appealing photographs and

illustrations that the pupils enjoy looking at and use as a basis for their written notes. Pupils also find the highlighted 'Key Points' useful as a focus for their learning.

The new version has been updated and extended by eight pages. The new pages are certainly relevant to the recent updates in the new GCSE textiles technology specification and are of benefit to the pupils. I would, however, query whether a school would want to stretch its budget to purchase a new full class set if it already has the original publication. At £11.00 it is good value if a school is buying it for the first time but it really does not differ enough from the first version to warrant the need for the two versions in school.

Design and Make It! Textiles Technology (Revised Edition)

Alex McArthur, Carolyn Etchells and Tristram Shepard

Nelson Thornes Ltd: £11.00

ISBN: 0-7487-6082-2

Orders: www.nelsonthornes.com

Appropriate content	✓✓✓	Generic use	←
Pupil/student use	✓✓✓	One of a series	
Teacher resource	✓✓✓	Photocopiable	
Visuals	✓✓✓✓	Pupil/student activities	←
Overall style	✓✓✓✓	Cross-curricular	

Design and Make it! Food Technology

Reviewed by Jonty Kinsella, Deputy Head of Department, Orleans Park School

I am very familiar with this text, having used the first edition for four years to support my QCA (NEAB) syllabus. This is a revised, slightly larger in size, edition and varies little. It does have three notable differences – a revised introduction, some sets of real examination questions, and tags throughout the pages that refer to web sites that pupils would find useful when doing projects.

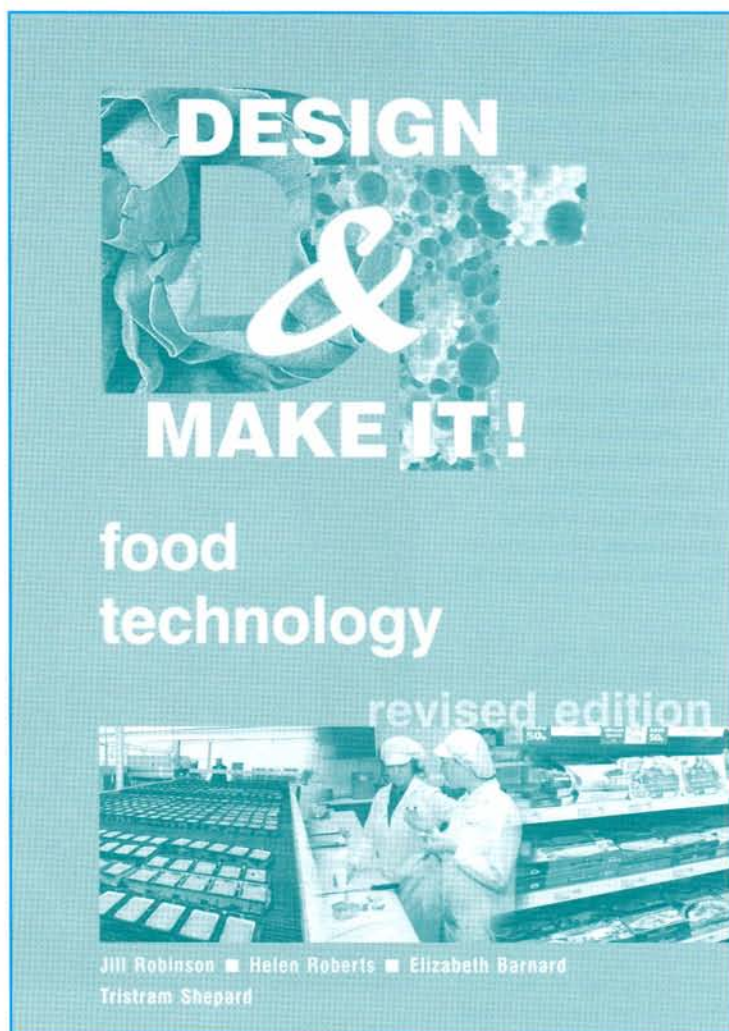
Essentially, as its name implies, this is a project textbook. The material is arranged into six topics of different length that aim to teach capability via design and make assignments (DMAs). It is suggested that pupils go through the projects in order, so that essential concepts, e.g. sensory evaluation techniques, systems, risk assessment etc., can be built up progressively as the topics change. The order of products/topics is as follows: breads, cakes, cook-chill meals, desserts, salads, snacks.

The most revision has been done on the introductory elements, especially the new material on ICT. Ways of using the computer are given with examples – costing using spreadsheets, nutrition modelling using databases, radar charts etc. A useful page on using the Internet and search engines is given with a list of web addresses. More addresses also appear in the tags throughout each topic. This is a pointer that additional material is needed over and above the text. This is one of the problems that I find when using the book. I need to teach more about other 'theory' areas such as ingredients, nutrition, bacteriology, and formulations. This takes up time and I find that I can only get through about four projects in the first year of Key Stage 4. I leave one for the coursework in Year 11.

Design and Make it

Jill Robinson et al
Nelson Thornes: £11.00
ISBN: 0-7487-60849
Orders: www.nelsonthornes.com

Appropriate content	✓✓✓✓	Generic use	⇐
Pupil/student use	✓✓✓✓	One of a series	⇐
Teacher resource	✓✓✓✓	Photocopiable	
Visuals	✓✓✓✓	Pupil/student activities	⇐
Overall style	✓✓✓✓	Cross-curricular	



This year, I may find that time is even tighter. In my standard comprehensive school we were used to having about 10% curriculum time in Key Stage 4. But a re-jigging of our timetable has had considerable effects on the time given to food technology and in order to 'loosen' options we have moved to a 25-hour, 30-period timetable per week. In Key Stage 3, this means only 60 hours of teaching before Key Stage 4 where we lose 40 minutes a week, a considerable amount. This means that I may have to shorten each project that I do and introduce less 'theory'. However, this is the very thing that is needed to achieve higher-level responses in the examination – via an ability to think analytically, using detailed knowledge and understanding.

There are few straightforward questions that can, for instance, be set for a cover. However, the three sections, now revised, on examination questions are more realistic and can be used in this way.

The graphics are carefully done and it is easy to find each of the sections/DMAs using the coloured edging of the pages. I purchased a set of these new books for all my Year 10s this year, and would recommend them to anyone who is following this syllabus.

Food Technology*Reviewed by Jacqui Waring*

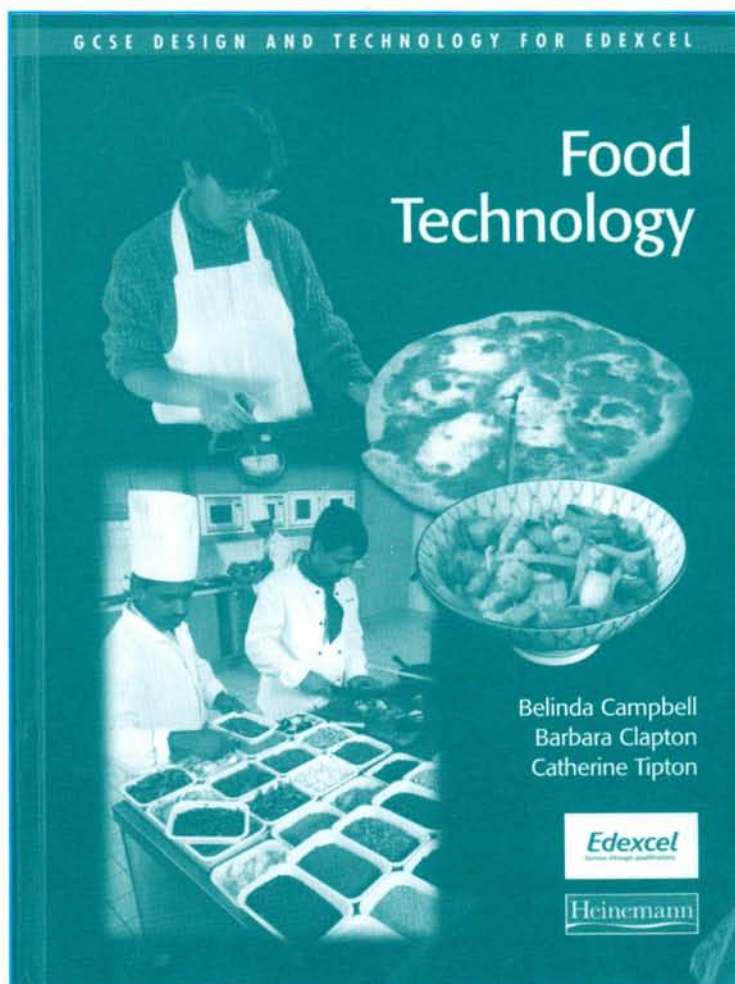
This book has been written to tell students what is expected of them in GCSE food technology and how to get the best results from the Edexcel specification. It supports both foundation and higher levels and can be used for the short and/or full course.

The book follows the same structure as the Edexcel specifications covering the core content. This comprises of: the classification and selection of material and components; preparing, processing and finishing materials; manufacturing commercial products; and design and market influence. The final selection takes the students through the coursework components for either the short or the full course.

Each chapter starts with the aim/s of the section followed by the content and ending with activities and tips to help students practise what they have learnt and reinforce their understanding. At the end of each section there are practice exam questions at foundation and higher level, although they are not labelled as such.

The book has an easy-to-follow layout with clear pictures and is student friendly. There are good industry case studies with pictures to show students' equipment and processes used in food manufacture. The book suits the target audience of a GCSE student, except in my view the lower ability student of the foundation level who would need help with the language level.

I particularly liked the introduction and the course content, how to use the book and how children could manage their own learning during the course. The book contains technical vocabulary used in the food industry backed up with a glossary. As a teacher, it is a useful resource with up-to-date information including areas such as moral, environmental and cultural influences when designing food products,



use of ICT in food manufacture and issues surrounding GM foods. The book is supported by a teacher's resource file.

This is a good basic class text for students on the Edexcel course and a teacher resource for those of us teaching to other exam board specifications. I have found the book readable, well presented and a good standard text for students at £12.99.

Food TechnologyCampbell *et al*

Heinemann Educational: £12.99

ISBN: 0 435 41789 4

Orders: 01246 543354

Appropriate content	////	Generic use	
Pupil/student use	////	One of a series	←
Teacher resource	////	Photocopiable	
Visuals	////	Pupil/student activities	←
Overall style	////	Cross-curricular	

Teaching and Learning Design and Technology

*Reviewed by Melanie Fasciato,
Senior Lecturer in Design and
Technology, The Institute of
Education, Manchester Metropolitan
University*

This book is one of a series which is aimed at bridging the gap between teachers and researchers, seeking to encourage 'evidence-based practice'. This is in response to the Secretary of State for Education's address in February 2000, concerning the need for research, government policy and school practice needing to be in closer relation to each other, in order to maximise the benefits of each. The series sets out to make research more accessible to the practitioner. To this end, the book is aimed at a wide range of readers: trainee teachers, teachers, curriculum leaders, advisers and lecturers, who would all find much of value in the collection of digests of recent research. The bibliographies and references enable readers who wish to pursue particular subjects at greater depth to do so.

This particular title is a collection of research findings from a number of eminent researchers and teachers in the field of design and technology at both primary and secondary level. The value of the book is that each chapter deals with vital aspects of everyday practice, such as curriculum development and cross curricular links in primary schools, and the meaning of problem solving in relation to design and technology, assessment and resourcing. Some of the chapters are very pragmatic in their approach, with case study materials highlighting successes achieved using certain approaches to designing and making. Others, for example the chapter on problem solving, take a more academic stance, providing a literature review of the area and concluding with a list of pedagogical considerations for the

teaching of problem solving as a developmental intellectual activity.

The chapter on developing textbooks provides a thorough survey of the textbooks which have been published for both teachers and pupils since the nineteenth century and an overview of the history of design and technology. However, it does not come up to the present day with a mention of the wealth of textbooks which are linked to the exam board syllabuses. This was a very important recent development in the provision of printed materials to support learning, since it was based on the identified needs of the teachers and learners – an example of research being used to improve practice.

Another chapter illustrates the impact that research and development in design and technology has had on education in other fields. In the past, assessment in process driven subjects, where capability is the focus, has been largely ignored. The author of the chapter on criterion referenced assessment, provides an interesting history of the developments in Key Stage 3 statutory assessment, albeit that these no longer apply. These developments made, 'the approach available for a wide range of vocational and occupational assessment procedures in schools and further education institutions'.

The book is well written and accessible, although some chapters inevitably demand closer reading than others. I was occasionally slightly surprised that the title of the chapter did not really reflect the contents. Where the chapter dealt with a digest of research findings from a particular research project, for example, I felt that this should have been made clearer in the chapter title. The only other weakness I found was in a diagram where the output motion was incorrect.

There is much of interest to the more general reader in this book. School governors and head teachers who read it will be provided with an insight into the academic basis for the subject area, together with examples of how this translates into classroom practice. For me, it will become a set book for my primary, secondary and Key Stages 2/3 students as it covers a range of issues which I have only been able to find previously in the IDATER conference papers.

Teaching and Learning Design and Technology

Edited by John Eggleston
Continuum: £16.99
ISBN: 0 8264 4753 8
Orders: 01202 665432

Appropriate content	////	Generic use	
Pupil/student use	////	One of a series	⇐
Teacher resource	///	Photocopiable	
Visuals	✓✓	Pupil/student activities	
Overall style	////	Cross-curricular	

Design & Make It! Electronic Products revised edition

*Reviewed by Michael Lawrance,
Head of Art, Design and Technology,
Bishop Fox's Community School*

First published in 1996 and now in a revised edition, this book is aimed at supporting pupils in their GCSE course and follows exactly the same format as the original. Throughout, its colourful and busy content includes a fair amount of photographic documentation of commercial examples of electronic products and casings and their means of production, including many references to computer aided design and manufacture. The material is presented in a clear and concise style, the language is accessible to pupils and is very reasonably priced at £12.15. It provides a firm foundation for pupils and teachers considering electronic products as a specialist GCSE subject. At my school, it has been a cornerstone of a highly successful GCSE offering for three years now, being commended by Ofsted and exam board moderators.

The central content of the book has not changed a great deal from the first edition and so I shall say little except that the authors originally provided substantial chapters divided into four projects – 'each contain a mixture of product analysis and development pages and knowledge and understanding pages which include short focused tasks'. For anyone not familiar with the original publication, the topics covered are: Electronic Security (logic circuits and interface devices); Filling in Time (time delay circuits and switches); Alarming Circuits and PCB's R 'Us (toys and games using counters).

At the end of chapters 1, 3 and 4, readers will find a double-page spread of typical GCSE style exam questions relating to the preceding projects. These have all been completely revised since the first edition and they are invaluable to pupils and

teachers alike for testing knowledge and understanding. They relate to knowledge of practical work as well as theory and teachers could apply them as short tests in class or adapt them to form the basis of an end-of-year exam. The authors have used more colour photos and have brought the material up-to-date with increased references to circuit board design and construction, industrial practices and Peripheral Interface Controllers (PICs).

As with the first edition, the book closes with three project suggestions the last of which, the automatic pet feeder, has been replaced with a self-explanatory project entitled, 'Alarms Around the Home'.

The most comprehensive changes in this edition occur at the beginning of the book where the authors have thoroughly revised the 'coursework guide which summarises the design skills ... for extended project work'. In content, this is about a fifth of the book and much has been packed into these pages. Much of it covers ground which is familiar to teachers but alas not always to pupils! The summaries of designing skills such as researching, generating and developing design ideas, quality matters, testing and evaluating are covered in a lively and concise style with cartoon prompts and photographic examples. Noting the changes in the GCSE specifications, there are references to environmental and moral issues and cultural awareness as well as a thumbnail sketch of the history of electronic products.

The emphasis on using ICT in electronics design and manufacture is substantial, including the use of CAD in the stages of generating and developing ideas. There is a lot of encouragement for pupils to make appropriate use of ICT in a number of ways: search engines, word processing, spreadsheets, digital cameras, PCB design and production. I was also particularly pleased to note the stress the authors had given to the early stages of an extended project – the importance of appropriate investigation and use of different research methods is an area that pupils often do poorly in. With more weight being given to relevance, any extra support and instruction in this field is welcome and space is given to determining project feasibility studies, interests and choices. There is an interesting section detailing the distinction between design specification and product specification

which is useful in helping to clarify this step in pupils' projects.

This book makes an excellent foundation for any department considering the introduction of this specialism at GCSE and represents good value for money. It would also serve well as an updated teacher resource or, if budget permits, replacement volumes for those already in possession of class sets of the first edition.

Design & Make It! Electronic Products revised edition

David Mawson *et al*

Nelson Thornes: £12.50

ISBN: 0 7487 6079 2

Orders: www.nelsonthornes.com

Appropriate content	////	Generic use	
Pupil/student use	////	One of a series	=
Teacher resource	////	Photocopiable	
Visuals	////	Pupil/student activities	=
Overall style	////	Cross-curricular	

** Teachers Pack only

Guidelines for contributors

The Journal of Design and Technology Education

is the professional journal of the Design and Technology Association. DATA is the recognised professional association which represents all those involved in design and technology education. The journal provides a forum for the exchange of views on design and technology education and welcomes contributions to all sections. Published papers become the copyright of the Design and Technology Association, unless otherwise agreed.

About the journal

The journal has three sections:

- Research
- Curriculum development
- Reviews

The research papers published will emphasise the provision of a better understanding of design and technology and the improvement of the quality of design and technology education in schools, colleges and universities. Papers for the research section should usually be between 3,000-5,000 words though in exceptional circumstances papers of a maximum of 8,000 words will be considered. The curriculum development section has a number of sub-sections focusing on particular areas (primary, secondary, initial teacher education, special needs, etc). This section may contain reports of a less formal kind (but still analytical) on aspects of interest to those involved in design and technology. Papers for the curriculum development section should be 1,000-3,000 words long.

Refereeing policy

Both the research and curriculum development sections of the journal are refereed and the normal academic criteria will apply. Each submission is read by the section editor and at least two other members of the editorial board, which meets three times a year. Contributors should note that there is likely to be a delay of several weeks between the acknowledgement of receipt of their work and notification of the decision of the editorial board.

Each article must be accompanied by an abstract of 100-150 words, as well as six key words for indexing. The author's name, title, current post and contact details, as well as the section for which the article is intended, should be stated on a separate sheet so that the article is suitable for double-blind reviewing. Please note that the editor-in-chief may, at his discretion, place the article in a different section from that suggested by the author.

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All contributions should be supplied as word-processed text on disk, in an Apple Mac or IBM-compatible PC format (Microsoft Word), with 2 typescript copies, double spaced, typed on one side of the paper. Pages should be numbered consecutively. Figures, tables and other illustrations should also be supplied on disk (see form overleaf). Where typescript copies only can be supplied, tables and figures should be placed on separate sheets and not included within the text. Please include photographs (with captions) where possible. Any illustrations (planning sheets, pupils' work, etc) should be on separate sheets, clearly labelled, and should be as clear as possible to assist reproduction. Please have your name and contact details on a separate sheet of paper. Typescripts and disks will not normally be returned to contributors unless sufficient postage has been sent.

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