

### Information Technology in Science & Technology

Jon Scaife & Jerry Wellington  
*Open University Press, ISBN 033509919x*  
 (hardcover) £30.00 (paperback) £10.00  
 Reviewed by Mr John Hanson

When this book popped through the letter box I was really pleased because it concerned the area of IT which is one of my main interests. I am glad to say that it more than fulfilled my hopes and expectations. It is rather unnerving to find one's own personal experiences written down as history but as someone who has lived through the whole thing I can testify to the accuracy of the record and to the perceptiveness of the comments in Chapter 1. Anyone interested in the development of IT in education would benefit from this, particularly IT and science students. My only quarrel with this summary is that it does not convey the enthusiasm and sometimes messianic fervour that many of us felt while it was going on.

There were some excellent descriptions of situations many of us have encountered, such as Computer Room Block, and some very thoughtful and thought provoking discussion of the role of IT co-ordinator and the human aspects of computers in school. The use of the concept of Three Pressures and Three Waves which have brought us to the current position of IT in schools was excellent and I found it very helpful. The chapters about specific aspects of IT in science education were a mixed bunch. They were all full of excellent examples, with addresses of suppliers, but I thought that they varied in depth and insight. The chapter on simulations had a very good description of the dangers of their use in science and the chapters on modelling, databases and spreadsheets were thorough, if a little bland. I wish that there had been much more about Data-logging and Control Technology. These seem to have come out as poor relations yet again and it seems to me to be one of the most exciting areas of current development. I have reservations about much that was said in the chapter on Word-processing and DTP. A little lateral thinking could, I feel, make this a really valuable tool for science, but I enjoyed

the analogy of the teacher who DTPed all their work but would not use a computer in the classroom. I also had reservations about the enthusiasm for Interactive Video etc. as I feel that they are only usable by a very small number of pupils. Despite my reservations I very much enjoyed reading these sections.

Lastly, I am very grateful to the authors for the quote by Kahn (1985) which I will treasure. 'They (computers) operate outside the viscous flow of time in which humans perform tasks.' Also for Chapter 13 'Issues to be Addressed' which I will be circulating to the management team of the school where I work after Easter and for Chapter 14 'Issues for the Future' which I will not dare to let them see as they thought we were close to solving the problems.

### Edward Barnsley and his Workshop

Annette Carruthers  
*White Cockade Publishing ISBN 1 873487 00 2 Price £19.95*  
 Reviewed by G.T. Jones

Biographies of makers of handmade furniture are rather thin on the ground and good ones scarcer still; in 'Edward Barnsley and his Workshop' one such rarity has appeared. Annette Carruthers has compiled a first class, authoritative and absorbing study of Edward Barnsley, both as a man and a maker. For once, also the publishers' blurb is to be believed; written with admirable restraint, it tells us that Edward Barnsley was in many ways '... a character ...contrary and self doubting' and that he '... believed fervently in the value of craftsmanship both for the individual and for society at large'. And we can agree that the work is '... much more than the biography of an interesting man and an important furniture designer'. He emerges from these pages as a dedicated and honest person, believing in the dignity of labour and the need for truth to materials in his work. He had no doubts at all about the continuing validity of hand craftsmanship in a machine age and insisted that 'some form of creative expression is essential to a healthy balanced life', p.63. His work at Loughborough is clearly and accurately

## Book Reviews



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### **GIRLS AS CONSTRUCTORS IN THE EARLY YEARS**

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This handbook sets out ways of involving girls in constructional activities and analyses the management issues that determine their achievement.

The authors are advisers in primary education and Carol Ross is co-author of *Can I Stay in Today Miss?*

Spring 1993, ISBN 1 85856 002 0, Price £7.95, A4 landscape.

### **MAKING THE PLAYGROUND** **A Key Stage 2 project in Technology, Art, English and Mathematics**

**Eileen Adams**

This book reports on the work of pupils at Gillespie Primary School in Islington to improve the quality of their school environment. As well as its mathematical and science content the work satisfies the requirements of the new attainment targets for Design Technology in the National Curriculum at key stage 2. It concentrates on the environment, but also incorporates the notion of games and play as systems and gives some consideration to artefacts which can be used in play activities. It is not always possible for pupils to realise their ideas in environmental design projects, but here, with the co-operation of a community arts group and the PTA, their proposals were put into effect. Truly, design education in action in the development of schools grounds!

March 1993, ISBN 0 948080 92 2, Price £6.95, 56 pages, 210mm x 210mm

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described and the importance of his influence in practical education is duly acknowledged. He was not without his critics, however, some of whom thought his influence was too traditional; the statement on p.118-119 goes some way to answering his charge.

For one's subject to be born in the first year of a new century (1900) must be a veritable stroke of luck for any biographer; it makes dating throughout the work so simple. The author of this work is meticulous in keeping her readers informed about dates and mercifully presents her material in strict chronological order: no nonsense here about employing some fashionable so-called thematic structuring. She takes us so smoothly through Edward Barnsley's life and times, each stage being clearly defined with the effects of experiences and influences neatly, to coin a phrase, dove tailed together: so the book is a great pleasure to read. The account is well supported by a bibliography of nearly seventy items of source material and many of Barnsley's own letters (of which there are a great number).

Mention must be made especially of the illustrations, which in a book of this kind can in places be as important as the text itself. They are generally of a high quality and include one or two excellent studies of Edward Barnsley, himself. What emerges from the pictures of his work is a clear indication of the development of his style from the early, medieval, Morrisian influence evident in the cupboard shown on p. 66 to the more refined, lighter classical times of the cabinets on, say, p.191 (though still unmistakably in the Cotswold tradition).

Barnsley was always talking about writing a book — or perhaps it was just that other people were always telling him that he should: but he never did. How fortunate, both for him and us, that Annette Carruthers happened to come along.

### Textile Art

Margo Singer & Mary Spyrou  
*A C Black ISBN 0 7136 3197 X Price £13.99*

Reviewed by Wendy Taylor

A useful reference book for technology keystages three and four. The book emphasises the wealth of knowledge and skills in our ethnic communities which should be shared, expressed and given a presence in our schools today. Many of the techniques that are included are simple. However, it does show that through careful use of design they can be used in elaborate and imaginative ways. The book gives clear instructions for the following techniques Appliqué, Batik, Embroidery, and Tie and Dye. It also illustrates the traditional use of decorative features alongside contemporary examples.

### Teaching Science, Technology & Society

Joan Solomon  
*Open University Press ISBN 0335099521 (hardback) £32.50 (paperback) £10.99*

Reviewed by Mr Allan Trueman

This book is part of a series with the umbrella title of 'Developing Science and Technology Education'.

The book traces the development of Science, Technology and Society from its beginning in tertiary education to its acceptance in mainstream science teaching.

There are chapters on teaching strategies and why STS is particularly important for females taking science, how games, simulation and role play can help in the presentation of different topics and a discussion of issues raised by the DISS project.

Generally, I feel that the book, which is quite short (seventy nine pages), gives a good outline of development of STS and could be read in isolation. However, in reality, this appears to be a course reader for one of the Open University courses and would probably be of more value if read within this context.

### The Whitbread Round the World Race Technology Module Resource Pack

*WRTWR, video, activity books and teachers notes. Price £28.73*

Reviewed by Paddy O'Hagan

These days sport attracts huge media coverage and the 'Round the World' yacht race is no exception. Whitbread sponsors the event and have used their involvement to produce a Technology Resource Pack for pupils aged '10-13 in Primary, Middle and Secondary schools'. In theory yacht racing looks a natural for D&T project work. Here is an attractive high tech context, with readily identifiable constraints, opportunities to use materials, potential links with BIS, Geography...

Resources consist of a video, teachers pack and activity sheets, all carefully cross-referenced to the current Order. Nine sections based around designing the boat, preparations and the race itself offer design briefs ranging across constructional materials, textiles and food as well as 'enterprise' (including logos and merchandising) and communication (including electronics). The comprehensive background/support material in the Teachers Book, including suggestions for IT, has been refined in practice. This is a good example of the current crop.

Yet despite all this work, ocean racing remains a specialist area. The *raison d'être* for packs like this is to give pupils a sufficiently 'real' experience to support teaching and learning. Is designing and making 'a small model boat' (in fact a hull) really ocean racing? Could not the 'main meal of the day' or protective clothing be supported by other contexts? However, I would recommend the pack for any school with natural access to this area or where colleagues or pupils already have some background and enthusiasm. Then, especially at KS3, the pack should form an excellent cross-curricular starting point for extended projects or focused PoS work, as the teacher's book makes clear. But if like me you thought Genoa was a town in Italy — actually it is a sail — you may just end up 'neaped'.



### Designing for Pupils with Special Educational Needs

DFE

HMSO ISBN 0 11270796 3 Price £14.95

Reviewed by Austin Matthews

When asked to review a book one could reasonably be questioned on the appropriate qualifications for such a task. I doubt that one person has all the knowledge and skills to be able to comment with authority upon such a document as this, dealing with special needs across the curriculum and age range. I do so on the basis of some experience of working with a variety of special schools as an LEA Advisor and as an interested bystander. NOT as any sort of expert on the subject.

Firstly, it should be said that putting together such a vast amount of information on a broad spectrum of educational life, with a higher proportion of 'non-standard' situations, is a mammoth task. I congratulate the

Architects and Building Branch of the DfE for having succeeded in large measure in putting before us the collective wisdom of many people to provide a thought provoking document.

Secondly, I believe that we should treat the document as just that, thought provoking. LEA architects, and for that matter those in private practice dealing with grant maintained schools and others, may be tempted to use this as a 'bible' with the recipes set in tablets of stone. In the sense that senior educationalists are representatives of the clients, the children, I would strongly recommend that this document be used as a starting point for discussion.

Whilst one would not expect it to be everyone's bedtime reading, do not make the mistake of thinking that the bulletin should only be used as a basis for new building work. Within these covers there is a wealth of information and layouts which may well benefit those of us who

have been at it for years. It may be that ideas for adaptations for existing rooms spring to mind after perusal of subject specific contents of the bulletin.

In terms of Design and Technology the sensitivity of equipping rooms with potentially dangerous machines, for a variety of special needs, is of paramount importance. It may be that in one instance the use of a lathe under close supervision is acceptable, whilst in another it could be courting disaster. For these varying circumstances I do find the advice on electrical provision to be inadequate. Not only should one expect to find a lockable isolator, as suggested, but individual machines of high risk should have their own lockable switch to obviate tampering.

I feel confident in recommending to you the use of Bulletin 77 as a thought provoker and general reference across the special needs spectrum.

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