

Software Review

ALIAS UPFRONT

Alias Research: £75

Available from Capedia Ltd, 11 Lower Dagnall St, St Albans, tel. 0727 869791

Reviewed by John Hanson

Alias UpFront is a 3-D design package which allows you to draw 3-D shaded objects directly, and which has been a pleasure to review. It comes in Mac and PC versions (I used the latter) and loads effortlessly. It comes with a comprehensive and well illustrated manual, which I ignored as I dived straight into the program. The icons are easy to deduce and the menu and mouse operations conventional, so I was able to produce several reasonably crafted 3-D shapes in a few minutes.

Most of the design packages I have used have been difficult to use and require you to have done a 2-D drawing and then translate it into 3D. Even those that allow you to build up objects in 3D in a Lego-like way usually require a great deal of work to build up a complex object. UpFront is very easy to use for those with little experience of PCs or design packages, and the manual's step-by-step instructions take users quickly from a simple starting point to complex drawings.

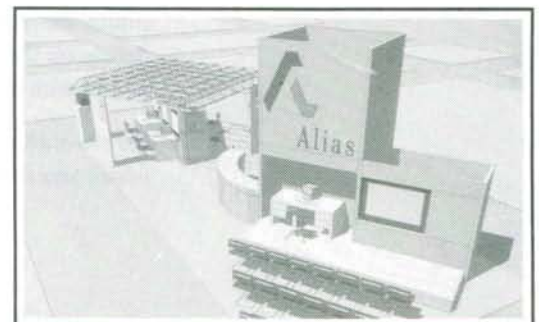
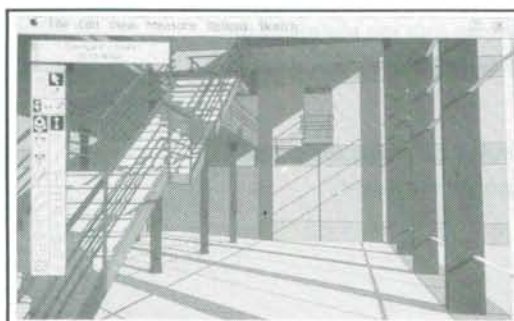
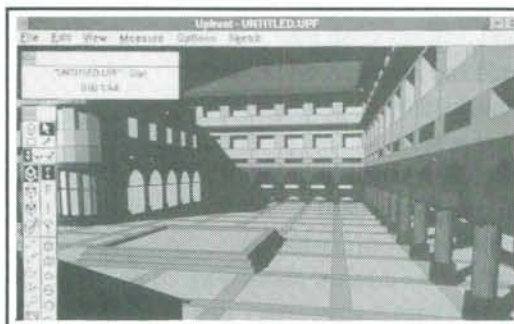
I was entranced by the way the package draws spheres and domes, and my final drawings were full of them. It is very easy to sketch out simple shapes and then use the program to build up structures in sections, or to cut away or add extra layers to create a background. The shadow option creates a realistic and

natural-looking image and the range of textures and colours available enabled the production of good and detailed images. UpFront can easily be used as an architect's design tool, and the combination of shadow from any sun position and easily created groups of shapes would make it very powerful in this field. It also allows you to design a product such as a box or shelves and view them against a background in various lights and from different angles. You can also place objects in front of scanned real images, which makes it a powerful tool for garden or stage design. It is as good as any other package I've seen for designing and experimenting with small objects, and for designing larger areas and related groups of objects, it is far better than anything else I've seen.

Its weak points are few. As with most design packages, alterations to complex images are very slow. It is easy to get lost in the fine detail of large images and to confuse angles of view — fortunately, a HOME key allows you to return to your original image. I also found that altering the image size by zooming in and out could be confusing, but no doubt practice would overcome that.

Where does UpFront fit into education? In school we are often bad at large-scale design projects and I will use this package with younger secondary pupils to look at large area designs such as gardens and playgrounds. Pupils also find 3-D visualisation difficult and this package will be useful with older pupils, trying out shapes for use in products. At A level and in higher education this program could be very useful in a range of design-based courses to design backgrounds for fashion shows, the internal or external structure of buildings or the layout of gardens.

Two other features I found particularly attractive were its price (£75 against \$995 for the US version) which is a bargain, and the helpfulness of the UK supplier, which is unusual in the world of design software.



The Good Technology Guide 1994

DATA

£9.95 (Primary); £19.95 (Secondary)

Reviewed by Danny Owen

With all the developments that have taken place in National Curriculum Technology during the last four years, you can be forgiven if you have lost track of all the curriculum support material that has been published — and fear not, for your prayers have been answered with this two-volume guide published by DATA.

Both volumes follow the same format, with resources classified as Construction Materials, Food Technology, Control Systems and Energy, Structures or Process Skills, with the addition of Business and Industrial Practices in the secondary volume. The guide is very easy to use: each entry has a brief description of the resource, its target key stage and all the information you need to be able to buy it. The layout, colour coding and index sections work well and are very user-friendly. You can search for ideas based on a topic, specific skill, material requirement or even price which, when you might only have £20 to spend, is important. It is more than a Yellow Pages guide in that there are also objective assessments of some of the more worthwhile resources.

The first edition will be updated in 1995 when I expect additional entries to appear, especially from small publishers and software developers, and more evaluations. It is a book which no school can afford to be without if you are to make informed decisions on resources for technology.

Objects and Images: Studies in Design and Advertising

Susann Vihma (ed.)

UIAH: \$40 ISBN: 9 519384 49 9

Reviewed by Prof. P. Roberts

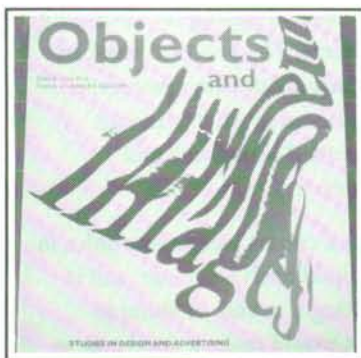
This is a collection of papers presented at an international conference in Helsinki, on the theme of the semantic dimension of designed objects. Put more simply, it asks why people choose particular products and what the relations are between choices, individual values and the making of personal identity and meaning. It's an interesting international collection, inevitably displaying the strengths and weaknesses of conferences when held together by a theme at a high level of generality. Provided the reader takes a

vicarious part in the conference, the strengths outweigh the shortfalls.

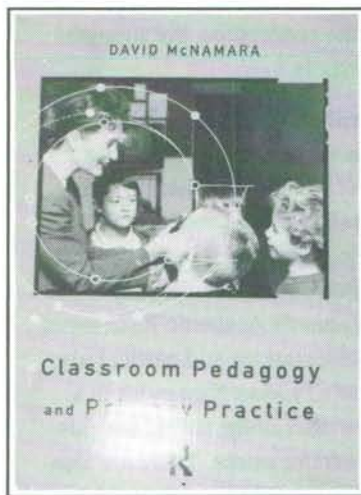
There are 23 contributions in all, and the presenters include some established names with some familiar messages: Alberto Alessi, for instance, on Italian design factories in Design and Poetry. Peter Lloyd Jones is good on Time and the Perception of Everyday Things; Odile Solomon's Aesthetic References and Cultural Representations and particularly, Fredrik Wildhagen's Product Semantics in a Macro Perspective offer illuminating insights within very useful frameworks. There are also typically interesting contributions from Victor Margolin and Christopher Frayling. Much of the substance of the more philosophical papers is a perennial part of some undergraduate courses, and not entirely absent in some courses in schools. Not all the papers are a good read, but the greater attention now being given to the meanings carried by (or attributed to) objects, is important.

Three points arise from *Objects and Images* which underline the timely appearance of its papers. One, their discussion represents a concern (but thankfully not one that is earnest in tone) towards attending to the human dimension of design — not to design as a marketing tool to sell more and more products that are hardly required, but to designing as the necessary making and expression of meaning and identity. Two, scanning the papers and reading those which strike a chord offers the possibility of taking part in the conversation by which a field and its discourse develop. This larger professional conversation is stimulating, alive and accessible to those who wish to take part, and its development is certainly necessary. Three (and this has a bothersome aspect), even from the particular perspective of product semantics, the papers reveal the intellectual poverty, the utilitarian emphasis and the static nature of National Curriculum Technology: bothersome in the sense that there might be expected to be a more evident relatedness between similar activities in general education and those found in professional design education and practice; and there is really very little sense of connection. We can be encouraged, however, in the sense that there is a larger view beyond the National Curriculum's partialities and limitations, in which all practitioners could share and develop.

Book Reviews



* UIAH publications can be obtained from UIAH Publications, Hämeentie 135 C, SF 00560 Helsinki, Finland



Classroom Pedagogy and Primary Practice

David McNamara

Routledge: £37.50 (hardback); £11.99 (paperback) ISBN: 0 41508 312 5 (p/b)

Reviewed by Alan Cross

The extent to which this is read may be affected by one word in its title. The word *pedagogy* is neither understood nor widely used in British primary education. Yet it is pedagogy, the science or art of teaching, which most practitioners value. Whether or not we use the pedagogy, there is much in McNamara's notion that it is the teacher who ought to be the centre of classroom activity. He sees the teacher as the most significant resource in the classroom and makes a strong case that as teachers our claim to credibility is through pedagogy based on a firm foundation of knowledge of the subject being taught.

Significantly, this review appears in a publication of DATA, our subject association. Consideration of teaching style and skill is highly relevant to primary design and technology. In order for primary teachers to implement D&T, I feel they require what McNamara calls a repertoire of pedagogical expertise. A book like this might not be at the top of your holiday reading list, but as a teacher of primary technology, ought to be considered. All of those engaged in consideration and development of teaching skills would find much of value here.

McNamara does not waste time on meaningless polarities such as progressive vs traditional. Books like this one will move us on in our consideration of teaching and learning. Behind his argument here is a need to recognise the worth of what good practitioners actually do. He reacts against attempts to dress teaching up in theory, preferring that we identify and articulate clearly that practice which works. A method is suggested by which teachers might analyse their teaching and thus gain professionally in the classroom and beyond through a raised level of awareness.

Considerable emphasis is given within the book to the concept of the teacher as a professional. This status has never been wholly certain and is threatened by attitudes, ideology and policies. McNamara seeks to promote a framework of expertise in teaching as professional knowledge in which we would celebrate and develop that which is usable or likely to work.

The title, which uses the word primary, is a little misleading as almost all of the examples in the book (and much of the emphasis) is towards Key Stage 2. This does not mean that the book is without value to teachers of Key Stage 1. Much of the considerable value of the book is that it presents a number of challenging questions and demands that primary practitioners seek to articulate the essence of teaching in a primary classroom. One such example and an important emphasis of the book is that of subject content. This discussion contributes to our ongoing debate in primary education, in spite of somewhat dismissive references to topic teaching which, whilst not perfect, has some strengths.

We have some way to go in consideration of teaching in primary education. This book is a welcome and important contribution to the developing balance of emphasis in teaching which considers the relative roles of teachers and children in the classroom.

Basic Electronics For Tomorrow's World

Len Jones

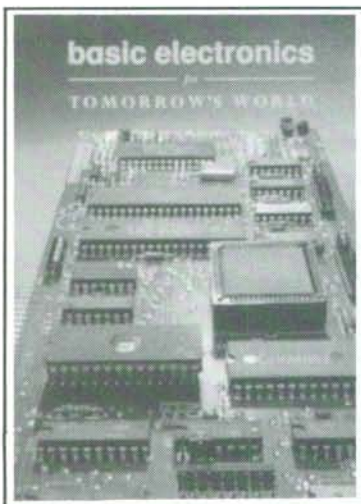
Cambridge University Press: £11.95 ISBN: 0 52140 917 9

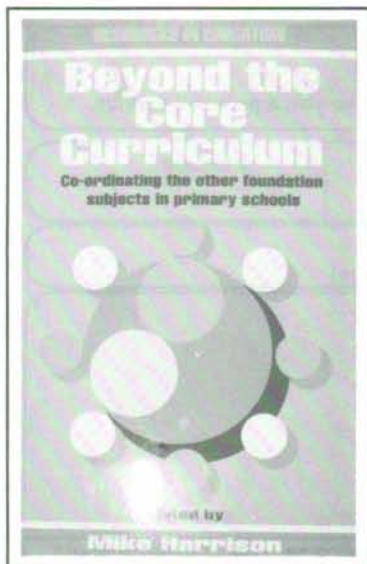
Reviewed by Allan Trueman

This book covers all of the basic electronics one is ever likely to encounter in the school situation. It could be used in all secondary courses that involve electronics and at A level for parts of the design & technology syllabus. The drawings and diagrams are clear and easy to understand, but could have been improved by the use of colour.

There are nine chapters covering topics as diverse as logic gates and paying for electricity consumed in the home. The practical work in this book can be carried out using prototype board, copper stripboard or printed circuit board, and each method is outlined and explained in the text.

In general, this book covers basic electronics in a detailed and comprehensive manner, and if you are either starting a course or about to reorder books, this would make a good course reader. At the very least it would make a good source book as its coverage is so comprehensive that it would fill gaps left by most other textbooks.





Beyond The Core Curriculum

Mike Harrison (ed.)

Northcote House Publishers: £11.99

ISBN: 0 74630 649 0

Reviewed by C.D. Snell

Co-ordinators in core subjects of English, mathematics and science are well served by publishers, but in the foundation subjects at primary level co-ordinators have been less well served. This book sets out to rectify that situation. It is a series of contributions by different authors with experience in their own field at primary level, edited by Mike Harrison, Director of the Centre for Primary Education at the University of Manchester.

For co-ordinators with less experience, it uncovers what was always potentially there but had not always been recognised. For the more experienced co-ordinator, it serves as a refresher and perhaps a source of ideas not previously considered.

Colleagues at secondary level will gain useful insight into and a different perspective of their own subject. It will perhaps also remind them that a lot of hard work goes into preparing pupils at primary level before secondary schools receive them. The issue of cross-curricular involvement is frequently raised whilst still acknowledging the right of any teacher to independence when appropriate.

Treatment of the traditional subjects is much as one would expect, and of the so-called new subjects, I found the section on IT particularly informative. There is good advice in the chapter on technology, but I felt that some of the information was a repetition of already well exhausted material and not overly useful diagrams that smack of College-of-Education-speak, to coin an Orwellian phrase.

In conclusion, there is a lot of good general advice on administration, management and psychology that is incidental, and other facets of education that will prove interesting. The opening chapter in particular is worth re-reading.



Food For Thought

STEP

Cambridge University Press: £5.95

ISBN: 0 52140 636 6

Reviewed by Rhona Humphries

Food for Thought is part of the STEP Design & Technology 5–16 initiative, which has been a major educational development produced by the Staffordshire D&T team. This book is aimed at Key Stage 3 pupils and is designed to look at new food products in a way which mirrors the commercial process. The Production of Food Products covers in depth the market research strategies, the development of food product, packaging and labelling, advertising and the product launch. Another section shows very clear flow diagrams helping to define what exactly are examples of systems and how these systems interact in, for example, the production of foods.

The section on developing research skills is well presented with the emphasis on guiding pupils to use a variety of techniques and any form of research in a meaningful and relevant way to assist the D&T process. Ideas for individual and group work are highlighted in orange throughout the book for teacher reference. Teacher planning is also helped by the use of a Data File which covers a variety of IT strands, and these could be used for assessment exercises or simply mapping the delivery of National Curriculum technology through IT.

The book is well planned and will help to deliver areas of the PoS which have not been as well documented in other publications, and therefore fills a major gap for teachers whose own expertise in the business elements of production development is in need of support. The book also includes many useful projects for delivery across the department, such as using control systems in the food industry.

The book is attractive and colourful, with many eye-catching graphics. Text is in a variety of colours and key points are well highlighted. It would serve as a useful resource for the delivery of business studies and food production elements of technology and could be used in its entirety to deliver technology across a department. It is also good value at £5.95.

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Joining DATA

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