

Design and Technology Education exhibition 1995

Reviewed by John Eggleston, Visiting Research Professor of Education, University of Central England

In relaunching a new style Journal it seemed pertinent to restyle this section. We have not asked our team of reviewers to concentrate their attention on publications sent to DATA for review, but have also included reviews of exhibitions and educational shows, recognising these as an important national feature of design and technology.

For those of you who want quick information look at the summary chart included at the end of each review. This is not intended to replace the review but to provide a quick reference guide to the materials. For those of you who enjoy a more leisurely browse, read on.

Key to rating guide:

★★★★ Best
★★★★
★★★
★★
★ Worst

⇐ Has this feature

"If there is still big money in education then it is not in Design and Technology." This was the almost universal view of the stand holders at last year's Design and Technology Education exhibition at the National Exhibition Centre in Birmingham. Many had already voted with their feet before the event as the vast empty spaces around the perimeter of the exhibition hall showed. There were noticeably fewer of the large glossy displays of the big players and much of their space was taken by smaller regional traders. The punters confirmed the analysis - many of the stands seemed permanently unvisited and the crowds gravitated to the almost continuous free seminar programme which the organisers had astutely laid on as an added incentive.

But the good news was the emphasis on quality - the theme of Andy Breckon's Maurice Brown Memorial Lecture. Almost all of the regular exhibitors had product ranges that were better in reliability, durability and appearance. It was almost as if some of the suppliers had successfully followed an advanced Design and Technology INSET course. Such enhancement ranged from the much admired school furniture of Emmerich and Levvad to the vacuum formers of C R Clarke down to the pencils for special needs children displayed by Staedtler with special crumble free lead. Emmerich's new lockable tambour door storage units were particularly functional and elegant.

This emphasis on quality was matched by much of the student work on display - notably the stands of the three curriculum projects: Nuffield, Royal College of Art and The Technology Education Project and of the training institutions. But it was most impressively visible on the display of A level project work from a variety of examination boards and schools.

But even the good news was clouded. Despite discounting, dealing and generous support services suppliers talked of being outbid by low cost, low quality products (not on display at the NEC) chosen by cost-cutting school bursars. And even the admirable A level entries seemed to be threatened by the attrition of Key Stage 4 Design and Technology, not least of all in Wales, source of some of the best entries

on display, where Key Stage 4 Design and Technology will now become entirely optional. And the publications on the DATA stand reminded visitors of the continuing decline in both primary and secondary school capitation levels.

Competition for what cash remains was strong. The National Council for Vocational Qualifications and most of the examination boards were present in strength, fighting hard for territory regardless of traditional boundaries - Wales claiming to have affiliated schools in the furthest corners of England. The Wiltshire-based Consortium was attracting teachers from all parts with the aid of teams of children showing how to build the second Severn Bridge with, of course, Consortium supplies and offering its visitors price-sensitive resources to schools nationwide. Like the other consortia it is well on the way to replicating a purchasing service that is no longer supplied by the Local Education Authorities but still needed by schools. The Consortium's free project file, 'The Budge Adventure' was in hot demand.

High on the list of attractions was the Inter-Action Learning Dome. A class of 30 children is able to crawl into the large inflated silver dome and experience a professional multimedia presentation of either Earth in Space or Sound and Light (rather like bringing the London Planetarium to school) at a cost of £58 or £65 per show (with quantity discounts, of course). The organisers claimed enthusiastic pupil response - certainly the children presenting at the show (on other stands) seemed to confirm it.

The Commotion stand showed a range of new products including a useful new Serial Interface for control technology (compatible with the Archimedes) along with new control and design programmes as well as updates on Tractromics. The new interface should be particularly useful to schools beginning control technology - it has 8 digital inputs, 4 analogue inputs and 8 digital outputs and takes 6 or 9 volts power supply.

Wood'n Fun displayed ingenious three-dimensional wood games (Stepets)

developed for use with special need pupils to enhance their dexterity, coordination and tactile and cognitive skills. These too were beautifully made in high quality materials and attracted many teachers who gave no other indication of having special needs.

Unilab Furniture has opportunely locked itself into the Nuffield project by offering 'Reference Mechanisms' enabling Key Stage 3 and 4 pupils to explore changing types of movement, forces, speed, distance, axes and rotations using standard building board components. The equipment should enable pupils to quickly replicate and develop mechanisms for use in their own projects.

Keystage Design must deserve the prize for the most opportunist company name but its low voltage control console is also impressive with great flexibility and a relatively unthreatening price. Capable of free standing or fixed use and easy integration with most existing workstations, it comes with a free pneumatic option kit.

As the hall emptied one teacher summed it all up: "The quality pupils are there, quality resources are there and the teachers aren't that bad. Why can't we deliver more?" His answer, in a word, was funding. The organisers of the Design and Technology show will need to give this much thought before next year's show is planned.

Exhibitors reviewed:

C R Clarke Limited

Unit 3 Betws Industrial Park
ANNANFORD
Dyfed
Tel: 01269 593860

Commotion

Unit 21
Coopers Court
NEWPORT PAGNELL
MK16 8JS
Tel: 01908 218880

The Consortium for Purchasing and Distribution

Hammond Way
TROWBRIDGE
BA148RR
Tel: 01225 771360

Design and Technology Association

Wellesbourne House
WELLESBOURNE
CV35 9JB
Tel: 01789 470007

Emmerich (Berlon) Limited

Wotton Road
ASHFORD
TN23 6YJ
Tel: 01233 622884

Inter-Action StarDome

HMS President (1918)
FREEPOST
LONDON
EC4B 4FU
Tel: 0171 5832652

Keystage Design Limited

Swan Lane
Hindley Industrial Estate
Hindley Green
WIGAN
WN24HD
Tel: 01942 526201

Levvad UK Limited

12 Gleneagles Court
Brighton Road
CRAWLEY
RH10 6AD
Tel: 01293 533922

Staedtler (UK) Limited

PONTYCLUN
Mid-Glamorgan
CF78YJ
Tel: 01443 237421

Unilab Limited

The Science Park
Hutton Street
BLACKBURN
BB13BT
Tel: 01254 681222

Wood'n Fun

Unit 14
Penistone Road Industrial Estate
413 Penistone Road
SHEFFIELD
S6 2FL
Tel: 01142 854466

**Project 2045 –
The Design
Council**

What will the year 2045 really be like? In 1995 the Design Council asked over 100,000 school children, businesses, designers and organisations across the UK to tell us. The results were displayed at a Project 2045 exhibition at the Royal Festival Hall, London.

The exhibition celebrated the Design Council's fiftieth anniversary, looking forward 50 years rather than back, encouraging people to let their minds run free and to think how design impacts on their lives.

CMG Computer Management Group, one of Europe's leading independent IT services companies, and Sony helped the Design Council put on the exhibition, using the latest PlayStation technology to show the hundreds of ideas that were generated.

The project was welcomed by schools and colleges and the results showed the creativity and enthusiasm of the students who took part. Visitors to the Royal Festival Hall were able to look at everything from Jet shoes, flying taxis and conveyor belt streets to vegetarian clothes, talking wardrobes and water pistols to freeze nasty strangers.

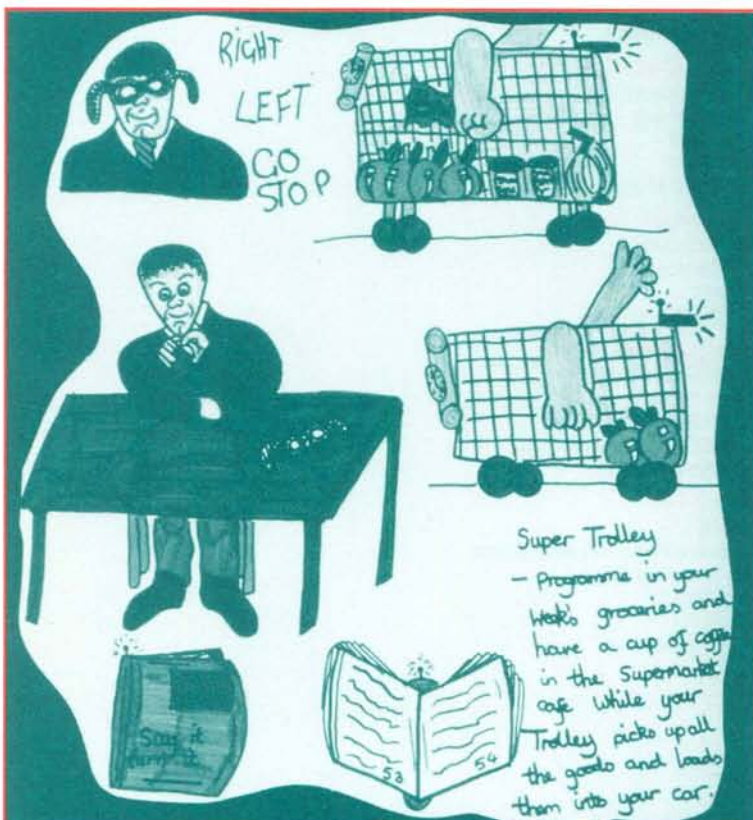


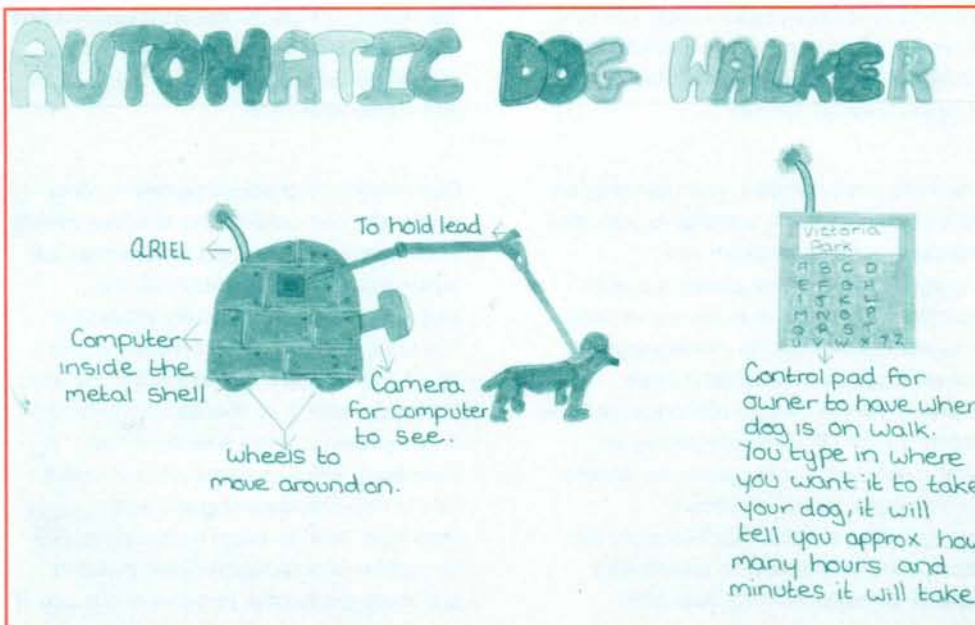
Just some of the evidence put forward by the Glasgow School of Art in the case against society who have been guilty of gross negligence and misconduct towards the environment and global issues. An appeal will be heard in 2045. You are the jury.

One of the many themes that emerged from the children who participated was a concern about the deterioration of the environment and many thought of practical solutions like a river cleaner, dry showers and anti-pollution masks. Businesses used 'Blue Sky' thinking to translate their consumers' concern about the environment into products that address this issue for the future. Electrolux imagined enzyme enriched dry washing machines to save water and reusing the energy created by white goods in other areas of the home.

The exhibition showed the fantastic imaginations of schoolchildren and the way in which they can apply design to every aspect of their lives. Some schools and businesses got together, bringing the designers of today together with the consumers of tomorrow. Some of the designs produced were outstanding. For example the Royal Mail worked with Greendown School, in Swindon, to devise the letter box of the future and Short Brothers worked with two schools in Belfast, St Bernard's and Gilnahirk Primary Schools, and designed a jobbing cubicle, automatic dog walker, electrical pushchair and mega specs. The exhibition proved that the future is wonderfully optimistic.

This exhibition will hopefully stimulate others to think responsibly about their future. In the





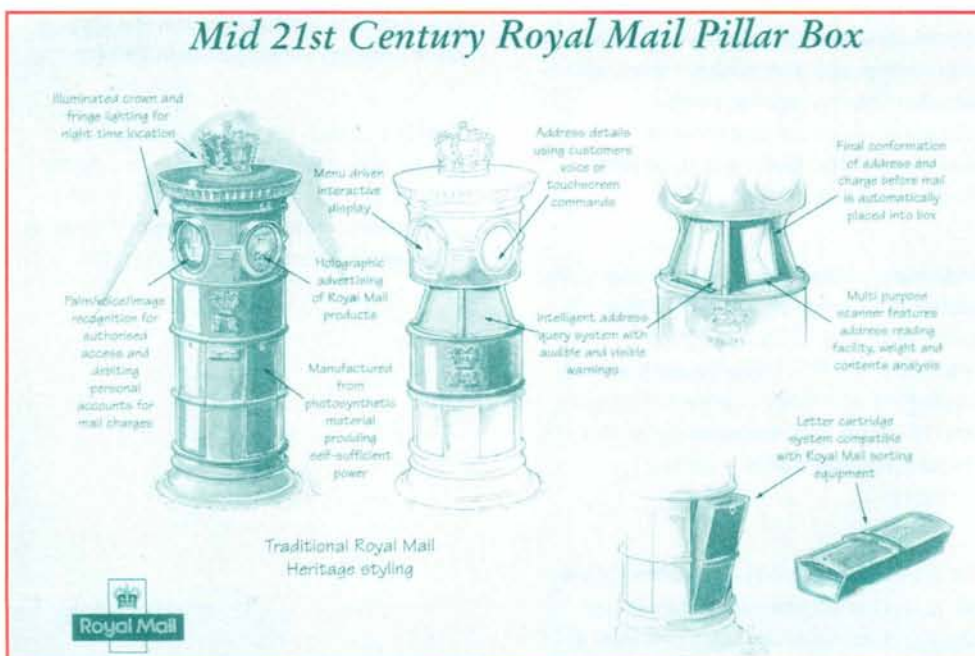
Students from St Bernards and Gilnahirk Primary Schools worked together with Short Brothers to develop the Automatic Dog Walker, a computerised device that allows you to program in the length of time and route then takes your dog for a walk.

first week of the exhibition over 1,000 more people contributed by designing their ideas for the year 2045. The best of these ideas will be added to the exhibition that will be put onto a CD-ROM and made available to schools so that they can run their own Project 2046, Project 2047 or Project 2048!

and secondary schools across the UK. The pack will contain active teaching ideas which will encourage pupils to look at their school environment from a design perspective. Teachers of all subjects across Key Stages 2 and 3 will be able to use it and it will provide an opportunity for design to be used across all school subjects.

Project 2045 is just one of many initiatives run by the Design Council. Its strategy is to develop further practical classroom tool kits to improve the teaching of design in Britain's schools. Between March and June this year it is launching its second, a Design Decisions in Schools 'Tool Kit', in 50 primary

All the work currently being undertaken by the Design Council will culminate in a National Design in Education Week in March 1997 that will have regional and national events around the country – all raising awareness about design education.



With the help of Royal Mail, pupils at Greendown Community School developed the idea of Interactive Letter Posting which makes posting a letter even easier in the future. It uses palm print recognition to debit your personal Royal Mail account for the cost of the stamp and enables you to access the worldwide address database.

Beginning Teaching, Beginning Learning

Janet Moyles (Ed)
Open University Press
Hardback: £40
Paperback: £10.99

*Reviewed by
Bridget A Egan*

A distinguished professional team from the University of Leicester has contributed to this series of readings aimed at the student or newly qualified teacher.

The editor, Janet Moyles, is an authority on early years education, learning through play, and classroom organisation and management. Here she presents a book that offers a series of insights into aspects of successful work in the primary school. The readings are presented in three sections, the first dealing with organising the classroom, and in effect presenting the central philosophy of the team, the second considering a variety of teaching approaches which put this philosophy into effect, and the final section considering aspects of responsibilities, roles and relationships, including assessment and record-keeping, equal opportunities, and the legal expectations for primary teachers.

Maurice Galton discusses the main task for children in the primary phase: that of learning to learn in a variety of subjects and contexts. Reflecting upon the role of the teacher in developing children's powers of independent learning and thinking, he also reviews recent research findings in the light of widely-held beliefs about education and of the continuing development of appropriate pedagogy to prepare children for life in the twenty-first century.

Janet Moyles' first chapter explores the primary classroom as an environment in which both pupils and teachers learn, and considers the management and organisational issues that must be understood if that learning is to be both effective and enjoyable.

Linda Hargreaves discusses the value to the teacher of focused, accurate and objective observation, and offers a range of techniques which will help young teachers pinpoint the actualities of pupil response in order to inform their management of the complex situation that is a primary classroom.

The section on teaching approaches starts with a chapter on effective planning, and includes chapters on investigative work in

the primary school, on developing oracy and writing skills, on developing thinking and skills in the arts, and on encouraging social and cooperative skills.

Each chapter is prefaced by one or more 'cameos': short descriptions of actual events in schools which are used to illuminate the ensuing discussion. Throughout, the language and format are very accessible. The book can be read as a whole, or used as a series of papers. There is a good deal of cross-referring, so that ideas mentioned in one paper are more fully dealt with elsewhere, which students will find useful. Where relevant, diagrammatic and illustrative material (such as sample pages for records of achievement) are included, and these are helpful. In my view, the use of photographic material is less successful, as the black and white prints are not always clear.

Beginning Teaching: Beginning Learning deals with some of the fundamental issues facing the prospective primary teacher. It does not consider in any detail specific aspects of the curriculum, and design and technology is only referred to in the chapter on investigations, by Tina Jarvis. Many of the general issues considered in other chapters are of direct relevance to the implementation of design and technology in school, however, particularly the consideration of how children's social and co-operative skills may be actively developed by the teacher, and the chapter on developing thinking skills in the arts.

This is a useful overview of a range of issues, which will be beneficial both to the beginning primary teacher and to those in schools and universities/colleges who work with new teachers in mentorship roles.

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

The World of Chocolate

Cadbury Ltd: £8.99

*Reviewed by
Richard Ager*

The World of Chocolate is the latest in a series of education packs from the Cadbury Education Service. It was designed and prepared in consultation with Birmingham teachers and the Birmingham Education Business Partnership.

The material, housed in a sturdy PVC wallet, comes in four sections, each comprising a series of A4 cards which can be photocopied for classroom use. There is also a 16-page teachers' booklet which describes the nature of each sheet, provides overall aims for the material and gives a series of topic webs showing how the material can be incorporated throughout the curriculum. This booklet also identifies links between the material and National Curriculum Programmes of Study and contains a glossary of terms and a list of additional resources.

Section one, *Exploring Chocolate*, gives background information on the retailing of confectionery and provides activities to assist children in undertaking market research and taste tests.

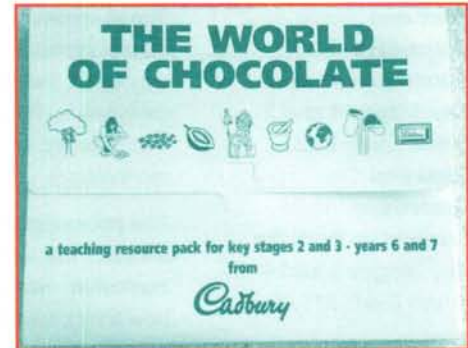
Chocolate History and the Growing of Cocoa looks at the Aztecs' civilisation and how chocolate arrived in Europe. It also provides background information on the history of Cadbury's and its products. Who would have believed that Cadbury's Creme Eggs have been around since 1923! This section also looks at cocoa growing today with a number of mapping and comprehension type activities being provided.

The third section, *Making Chocolate* looks at the detail of chocolate production as well as its packaging. This inevitably leads to activities on designing and making your own packaging and the development of an advertising campaign.

The final section provides material to help you to get the most out of a visit to 'Cadbury World' in Birmingham.

The target audience for this material is Y6 and Y7, clearly aiming at the primary-secondary interface. However, the cross-curricular nature of the material is likely to make it more accessible to the Key Stage 2 teacher. The material is written appropriately for this age group.

The teachers' notes are very general in nature, and although a whole series of aims



are included I would have liked to see specific objectives outlined for each sheet or, where appropriate, group of sheets. Again, the topic webs are extremely broad, with the inevitably tenuous links which occur with such an approach — "writing a poem or limerick" for English or "design of a poster or frieze" for art and music.

The design and technology elements of the topic webs focus strongly on making packaging. The market research and product development is included under mathematics and science in the topic webs. The only other design and technology activity identified is "Making a cocoa pod" which includes no designing, and will hardly stretch the making skills of Y6 pupils.

The material provides some high quality information sheets which can be used in a wide variety of ways. The objectives behind a number of the activity sheets are, however, rather unclear. What are the children to learn by "colouring in the two pictures which show scenes from the Maya and Aztec civilisations"?

I can envisage a group of children undertaking a very enjoyable design and technology activity devising a "new" snack bar, undertaking market research, taste tests and marketing and advertising the product, and this pack would be extremely useful in providing resource material to assist the children in their project. I would be a little more wary of using some of the activity sheets in their current form.

I would recommend this resource as a useful source of background information for children undertaking projects on chocolate, and for providing focused activities for children engaged in developing food products.

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

Steel and Motorways Curriculum Pack for Key Stages 1 and 2

British Steel: £8.50

Steel and Motorways Curriculum Pack for Key Stages 3 and 4

British Steel: £11.00

Reviewed by Robert Bowen

These cross-curriculum packs relate the school curriculum to the world outside of school via the theme of steel and motorways. They focus on science, mathematics and technology (design and technology).

The packs provide a range of activities linked to the theme for each of the curriculum areas they focus on and indicate how they could be used to support other areas of the curriculum. They are well presented and packaged in sturdy plastic boxes.

The teacher's guide in each pack explores the purposes of the pack and provides some useful insights into curriculum opportunities based on the theme. An interesting icon-based approach to the identification of curriculum areas is used. There is also a coding system which attempts enable the teacher to structure the use of the materials. Guidance is provided about how the teacher might plan to use the resource. No direct reference is made to the National Curriculum. The comments below relate to the design and technology components of the packs.

Key Stages 1 and 2 pack

The Key Stages 1 and 2 pack consists of a teacher's guide for the activities at both Key Stages, a set of activity sheets for Key Stage 1, a mathematics, science and technology activities book for Key Stage 2, a

pupil reader (which could be read by the teacher at Key Stage 1 or the children at Key Stage 2) and two posters.

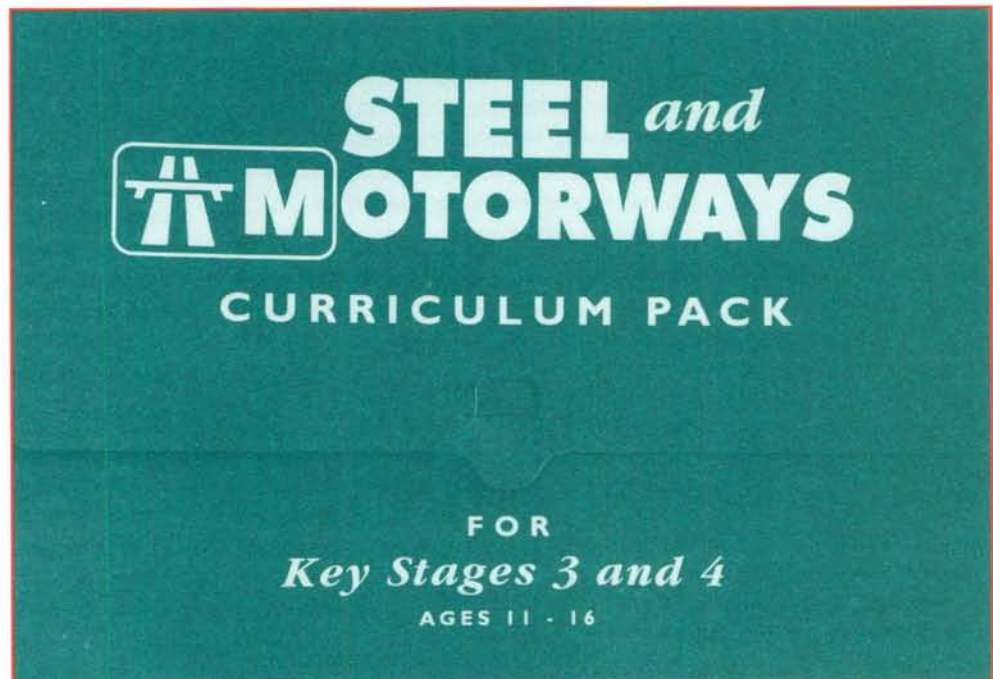
The Key Stage 1 cards contain lots of ideas, many of which are excellent. The Key Stage 2 booklet is also well conceived. The activities are on the whole very good and there is lots of useful information which the teacher could adapt or use directly with the children.

The posters are colourful and could be used as the focus for discussion. The 'roads' time line has some interesting features, but unfortunately there is no concept of scale, with 2220 BC-850 BC occupying the same space as 1981-1994. This would confuse younger children.

Key Stages 3 and 4 pack

The Key Stages 3 and 4 pack consists of a teacher's guide for the activities at both Key Stages, booklets covering the whole of Key Stage 3 and Key Stage 4 in mathematics, science and technology, together with a poster. Each booklet is sub-divided into Key Stage 3 or Key Stage 4 ideas.

The technology booklet contains some useful activities focused on the theme. Many of these are not new but have been adapted to the context; this does not make them any less valuable. These activities are mostly focused tasks though some could be developed into more ambitious designing and making assignments. There are also



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

some investigation and disassembly activities and, like the Key Stage 1 and 2 pack, this pack is a useful source of ideas.

When used selectively both packs could be of real value. However, the teacher needs to spend some time sorting out how to use the large number of possibilities presented most effectively. A major difficulty is clarifying the content area each task would address. To make best use of any one activity would require considerable analysis.

There is also a distinct lack of 'teacher friendliness' in some of the writing. The authors sometimes adopt a hectoring tone in telling teachers what they ought to do. This is particularly prevalent in the 'Teaching and Learning Styles' section of the 'Teacher's Guide'. Teachers do not need to be told about different teaching and learning styles – these are a fundamental part of their everyday lives. There is also some condescending comment about the teacher's role in each of the subject sections. The tone here is often pedantic and irritating.

The large number of activities is the strongest facet of both packs, and if you set aside the annoyance at some of the writing, at £8.50 for the primary pack and £11.00 for the secondary pack, they are recommended as just about worth purchasing.

**Design and Technology in Action:
Classroom activities with an engineering
context for National Curriculum Design
and Technology at Key Stage 2**

Engineering Training Authority: £25.00

Reviewed by Robert Bowen

This well-presented resource pack consists of a series of booklets, video and poster gathered in a sturdy plastic case. The 'How to use this pack' booklet not only provides a good overview but also explains clearly National Curriculum requirements. The five activity booklets are built around a common theme of the 'Engineering of ...' and this title might, at first reading, be a little off-putting for some primary teachers – it shouldn't be. The class teacher is well supported by the materials and the authors go to some length to indicate that little previous knowledge of the engineering topics tackled is required.

In fact, the range of topics is very broad, covering the design and production of bread and textiles as well as the perhaps the more expected themes of cars, drinks containers and electronic circuit boards.

Each of the 'unit booklets' has a clear structure providing information about the field of engineering to be studied, notes for the teacher (these could probably be used directly by older pupils), sample activities, safety points, further ideas linked to the topic, photocopiable sheet plus an indication of cross-curricular links and IT activities.

The video is organised with sections covering each of the topics. The quality of the reproduction is good and the visual images lively and interesting. Each section illustrates effectively the design and production process associated with the topic and gives some valuable insight into the engineering context. An example of classroom-based activity is also associated with each section.

The pack is clearly targeted at encouraging teachers to think more broadly about the engineering context in which much design and technology resides. It also attempts to demystify engineering and illustrate the fundamental effect the work of engineers has on everyone's life. In all of these aims it is very effective.

Teachers will find this resource very valuable and its supportive style should engender confidence. The activities are practical, manageable and should be interesting. A slight irritation was the sometimes condescending tone in the 'Engineering Background' notes but this only creeps in very occasionally. On the whole the information here was useful and the level of background knowledge appropriate to the activities described.

I enjoyed reading through the pack and looking at the video and what is more important found some useful ideas. The resource is easy to use, very comprehensive, but also very concise. The price tag of £25 might seem a little high but is well worth the investment. This pack is to be highly recommended.

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

things: thinking things through with 7-11 year olds

Science Museum:
£4.99

Reviewed by Marion Rutland

Visiting the Science Museum in London can be very exciting and stimulating for children. It is well placed for transport, group parties are catered for and there is a daily programme of actors in the museum who help to bring the collections to life.

The Science Museum has opened a new gallery called *things* specially aimed at 7-11 year olds. However, as with all school visits, preparing the children to gain the maximum from their visit is important. With this in mind, The Science Museum has produced a resource, *things: thinking things through with 7-11 year-olds*, for adults to help them and their children get the most out of their visit. It provides background information and suggests questions and activities to focus children's thinking both in the gallery and afterwards.

The resource emphasises that *things* is a place where children are encouraged to think and ask questions about everyday objects and how they affect people's lives. The suggested activities are intended to stimulate children into an active hands-on approach to learning. Most of the objects in *things* are well-known modern objects, allowing the children to start with the familiar and look at them in greater depth or in different ways. *Things* enables children to explore objects not normally found in the classroom or at home. Cross-curricular links are made between the science, design and technology, history and English curriculum.

The gallery is divided into an introduction zone which provides an entry point, in any order, to three themed zones with interactive exhibits. The themed zones have distinctive identities. 'Inside things' concentrates on manufacturing, component parts, design, mechanisms and inspecting and testing. 'Things and me' looks at the importance and value of objects, changes in objects over time and the effects they have on our lives, and how things are designed specifically for people and the human form. 'Using things' considers how some tools are better than others for different jobs, using tools to find out more about objects, and using technology to solve problems.



The themes explored in *things* can be developed in other areas of the Science Museum. Galleries to be visited include Flight, Ships, The Exploration of Space, Launch Pad, Power: The East Hall, Time Measurement, The Secret Life of the Home and Food for Thought.

The *things* gallery is aimed at the age range 7-11 years, which could include Year 7, the first year of Key Stage 3. With regard to the National Curriculum, elements of the science and design and technology curriculum are well covered. The significance of objects in our everyday lives, that they are designed and manufactured to meet identified needs, is an essential aspect of design and technology. The resource *things: thinking things through with 7-11 year-olds* is recommended if a visit is planned. It provides the adult with an overview of the gallery and a useful framework to ensure the children enjoy and benefit from their visit.

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

D&T Challenges

RCA Schools
Technology Project
Teacher's Resource
1: £25.00
Course Guide for KS
3: £10.00
Student Book: £7.99

*Reviewed by Tim
Fulford*

D&T Challenges consists of three publications: a *Teacher's Resource Book*, a *Course Guide*, and a *Student Book*. The review covers Y7 materials only, but later this year the publishers hope to have Y8 and Y9 available.

The RCA Schools Technology Project team is impressive, comprising a full range of educational practitioners and advisors. They have developed a resource which will actually work in most schools either as part of existing schemes of work or in its own right. Every effort has been made to ensure that the 'Challenges', the presentation, the layout and the inspiration that the course provides are as realistic and as viable as possible.

Each book is well structured, easy to follow, interesting and inspiring. There is a wealth of photographs, diagrams, tables, drawings and sketches which make it a pleasure to use.

Course Guide for KS3

This is a useful guide to the KS3 part of the course. The 63 pages are packed with useable information and guidance. It is easy to understand how the course operates and how it can be applied to actual classroom teaching. The guide covers:

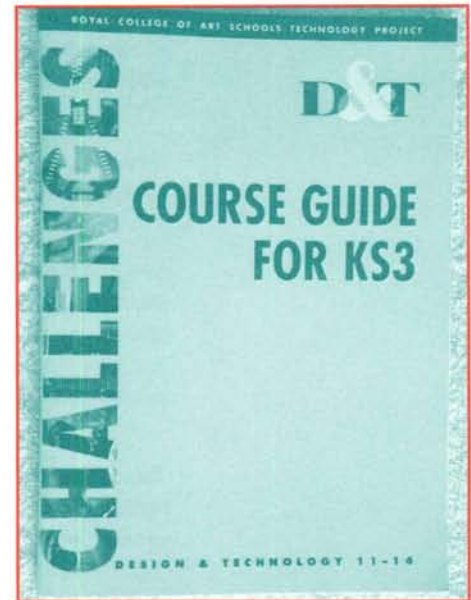
The Curriculum Model — Spiral Curriculum Models, Moving from KS1 and 2, Summary of National Curriculum changes in Design and Technology for 1995, Support from SCAA;

Operating the Curriculum Model — Mapping the Curriculum, Planning the Year Units, Choosing Units for your School, Recommendations for Senior Managers;

Teaching and Learning Model — Students' experience, Routes for Individual Students, Differentiation, Progression;

Assessment and the National Curriculum — Mapping the National Curriculum Requirements, Assessment Scheme and Assessment Capability in D&T; and finally *Pulling D&T Together*.

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



The clear and readable style encourages the user to investigate further the possibilities that this course has to offer. The user is guided carefully in a structured way through every aspect of the course and is left feeling confident and inspired. There are special highlighted areas for INSET use. These are a delight for the head of Design and Technology considering the introduction of this course!

The Teacher's Resource Book

This is a spiral-bound publication with some 140 pages, part of which may be photocopied with the usual restrictions. It is divided into a number of sections:

Introduction — explaining the aims, features of the designing and making assignments, summary charts.

Designing and Making Challenges — covering all of the pupil challenges.

Designing Skills — How to use designing skills, launching designing and making challenges, designing checklists, planning and time management, evaluation and assessment, and a glossary.

Teaching and Learning Issues, the final section, covers differentiation, progression, assessment and assessment charts.

The Resource Book is just that, a valuable resource for the teacher, full of relevant information and guidance. It is not prescriptive or dictatorial, but a gold mine of useful directions. It does not provide all the answers, but rather starting points. The layout is clear and appropriate, with good use made of diagrams, tables, charts and pictures. The changes from portrait to landscape format are irritating but inevitable.

The Student Book

The range of 'Challenges' for Y7 is excellent. Areas covered include a wide range of pupil friendly and stimulating topics such as chocolate, textiles, puppets, CAD/CAM, Jewellery and much more. Each of the 12 'Challenges' is presented to the students in a lively and colourful format. It is certainly something which pupils would enjoy following.

Each 'Challenge' is supported with appropriate background material, historical perspectives, different process and techniques are explained, research and marketing skills are highlighted in lively layouts and methods of effective communication for Y7 students.

The second section of the student book contains detailed information on the design process from its initial stages through to the important skills required for evaluation.

The Y7 Student Book is aimed directly at the students. The language is appropriate with supporting graphics, and the balance of words and images is just right. The space on each page has been carefully planned and used. Students will certainly feel that they can delve further into each 'Challenge' to a depth with which they feel comfortable.

The RCA team must be praised for this course which I can only describe as outstanding. It is clear that a great deal of time and effort have gone into the development of a stimulating and varied course content. The three books which make up this first part of the course for Y7 are inspiring. The 'Challenges' will certainly meet with the approval of students and teachers alike.

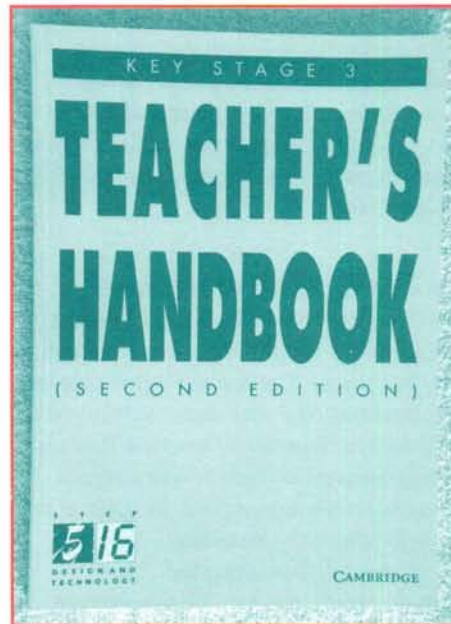
The presentation of all three books is excellent — crisp, clear and 'challenging'. The appropriate use of graphics, photographs and text form a balanced and visually attractive resource. The cost of the books is what we have all come to expect these days (Student Book £7.99, Resource Book £25, Course Guide £10). The Resource Book is partially copyright free which explains the higher cover price.

Without any hesitation I recommend this course as a viable development. It will certainly be considered for use by my department.

I found this to be an excellent book. It is full of relevant information and advice that will help anyone teaching or trying to organise the teaching of Key Stage 3 design and technology. It is organised in a usable form with chapters on Departmental Management, Curriculum Issues, Planning and Assessment. It also contains many excellent and useful ideas, schemes of work and analysis of the content of the schemes and topics and some photocopiable sheets as examples.

This will be a useful book for setting a baseline for your own teaching and departmental work. I don't necessarily agree with everything laid out in the book nor would I always do things the way recommended but the fact that the people working in the Staffordshire Technology Education Programme (STEP) have taken the trouble and care to lay out their thinking and ways of working gives you a starting point for careful consideration of your own teaching. It is much more valuable than a textbook because it is the sort of book that can form the basis of discussion and development within a department or for individual teachers.

I have been very complimentary so far but I have two complaints. First, it is very, very dry. The only hint of humour, calling the teacher inputs TIPs (as in 10 handy ...), could well be accidental. I had real problems settling down to read through it all when several novels were also waiting to be read. I really feel we should all try to be informative, educational and *interesting*. Secondly, I think at £25 it is very expensive. Despite its excellence, if I had picked up this book in a bookshop I would probably have put it down again when I read the price. I don't feel that including a few photocopiable masters, which are useful but not essential, is an excuse for charging twice what I would be prepared to pay for it.



**STEP Key Stage 3
Teacher's
Handbook 2nd Ed**
Cambridge University
Press: £25

*Reviewed by John
Hanson*

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

Design and Technology Projects for Secondary Schools

Kent County Council
Education: £25

Reviewed by George Asquith

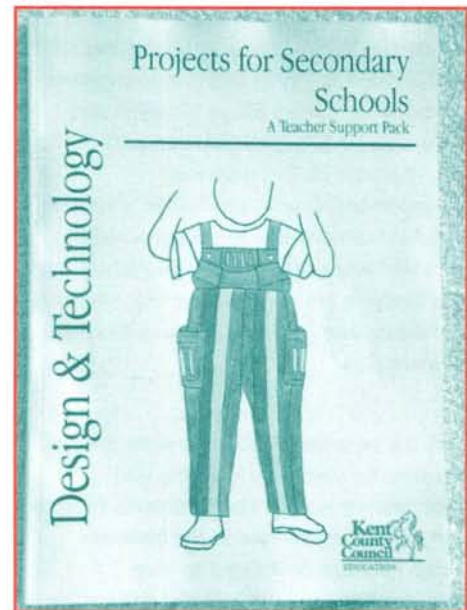
This 110-page publication is produced by teachers for teachers and the material contained is being used in Kent schools. The soft-cover book is one of a set of two and is aimed at Key Stages 3 and 4, with a separate publication being available for Key Stages 1 and 2.

The intention of the book is to support teachers and stimulate curriculum delivery in the various contributing areas of design and technology. The content is well ordered and displayed in a very useful format which if completed diligently by teachers for their own projects would lead to well planned projects. I have reservations on some of the projects selected – 46 in total – including 'Clock design', 'Pull along toy', 'Light shades', 'Apron design', 'Model bedroom'. I think much of the planning was done prior to the publication of the National Curriculum document of January 1995 and this comes to light as many projects are context-based – school, home, environmental.

Most projects are four-page spreads which contain useful details about the project brief, case history, strategy, outcomes, key skills, knowledge, vocabulary, weekly plan, materials, tools, resources and IT. Each project is evaluated through the study of problems, the quality of the products and the quality of learning. A number of colour photographs are included and black and white photographs and drawings are exhibited for each well laid out project.

The book will be effective for the teacher who needs a good format in which to plan work. It will help many others come to terms with the new Order for design and technology. The price of £25 is expensive (free in Kent) but no doubt reflects the hours of work and dedication by the editorial team.

It is recommended, but should be viewed first.



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