

Design Against Crime

Reviewed by Richard Foulger, Co-ordinator for Post-16 Technology and Health and Safety, Hove Park School, Brighton

At the end of each year, how often to we wish that someone would publish a Scheme of Work that can be easily slipped into the Key Stage 3 design and technology curriculum without hours of discussion and meetings? Well, this might be it!

'Design against Crime' is not another of those initiatives that attempts to promote a particular section of industry – far from it. This is a major design and technology development which runs from Key Stages 3 and 4, through higher education courses and University, to professional design practice.

The 'Design Against Crime' initiative is a national initiative, funded by the Home Office and the Design Council. The idea is to 'fight crime through good design' by encouraging the citizens of tomorrow to become involved in recognising the benefits of living in a crime free society. To this end, this particular review concerns projects designed for Key Stage 3/4.

At present there are two design and technology projects available:

- Alarm Systems
- Posters.

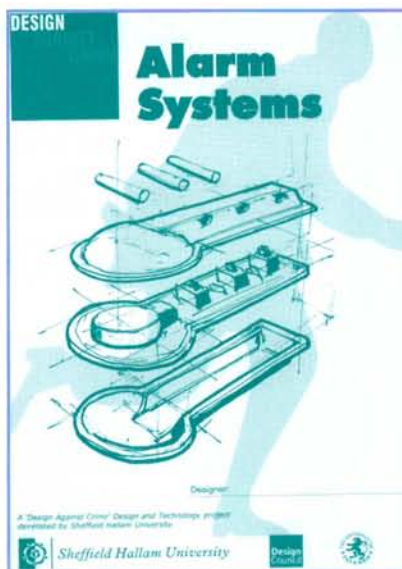
Each project pack consists of a pupil workbook, teacher's notes and a supporting information poster (A2 size) relevant to the project.

As might be expected in a design and technology project, the major part of each pack concerns a design and make project. These packs, however, have the added bonus of not only fitting in very nicely with the delivery of the National Curriculum but also to allow design and

Design Against Crime

Tim Lewis, Colin Chapman *et al*
Sheffield Hallam University Press:
£15.00/set
Orders: 0114 225 4702
shupress@shu.ac.uk

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



technology to contribute towards numeracy, literacy, ICT and citizenship.

The A4 size workbooks are designed so that pupils feel they have 'ownership' of them. This is reflected in the excellent standard of overall presentation, quality of layout, colour, graphics and contents of the workbooks. They not only cover set exercises (for which space is provided), but all the other areas that one would expect to find in the design process. In addition, pupils are provided with quality supporting information, such as how to carry out a particular piece of design work or how a manufacturing process operates. The contemporary, user friendly nature of the graphics should appeal to any Key Stage 3/4 pupil whether working as an individual or as part of a group.

The theme, as suggested in the title, is concerned with the effect of criminal activities on society but the emphasis is on responsible behaviour rather than punishment. Both projects begin with research and analysis exercises based on crime figures. They end with an evaluation and a chance to reflect on the effect that criminal activity can have on people.

A particularly nice touch to the front cover of the workbooks is that the traditional, bland, 'Name ...' has been replaced by the more inviting 'Designer ...' – much more acceptable to a Key Stage 3 pupil!

The teacher's notes for each project, in A4 format, are comprehensive and full of good advice. For example, the headings of the notes for the poster project are:



- designing and making the poster
- poster project rationale
- the starting point
- learning about poster design
- learning the skills
- developing a poster design
- modelling mechanisms
- H&S notes
- further development
- the gallery
- making the posters
- evaluating the outcomes.

The headings for the Alarm System project are set out in a similar pattern.

They are not provided in the same 'glossy' format as the workbooks but they do not really need to be as they are working notes and can be stored in plastic wallets and/or in a clip file along with any other notes.

It is difficult to judge how long each workbook would last, but because of their layout, and the teacher's support material, it would not be difficult to extend or differentiate the work. It is also possible to use both these projects as a starting point for Key Stage 4 graphics or electronics (a Home Office web site is available to obtain further information in order to extend tasks for both projects), but they are more suited, essentially, to Key Stage 3.

Each project is available in a class set of 25 workbooks; teacher's notes and an A2 size poster which is relevant to each project.

The cost per set, including post and packaging is £15 – excellent value for money.

GCSE Textiles Technology for OCR

*Reviewed by Charlotte Tweedy,
Teacher Textiles Technology, Joseph
Rowntree School, York*

GCSE Textiles Technology for OCR by Carey Clarkson, Jayne March and Joy Palmer is a new publication specifically aimed at supporting students and teachers following the OCR full and short courses.

It is paperback format and slightly smaller than A4 size. Other publications available in the same format are:

GCSE Textiles Technology for OCR
Teacher's Resource file

GCSE Food Technology for OCR Student
Book Second Edition

GCSE Food Technology for OCR
Teacher's Resource File Second Edition.

The book is 160 pages in length and is divided into colour-coded sections which are:

- Developing a design brief and drawing up a specification
- Generating design proposals
- Product development
- Product planning and realization
- Product Evaluation
- Internal Assessment and post GCSE options.

Included in these sections the knowledge and understanding of textiles technology is covered, as well as help for students on completing their coursework.

The book is obviously designed to support the OCR syllabus, but that does not mean to say it would not be useful to anyone following another syllabus. It has a clear, easy to follow format with well-illustrated diagrams and colour photographs throughout; using in many cases, examples of students' work to illustrate a particular point. At the end of each section are the 'key points' that have been covered, also questions to test a student's knowledge and understanding

GCSE Textiles Technology for OCR

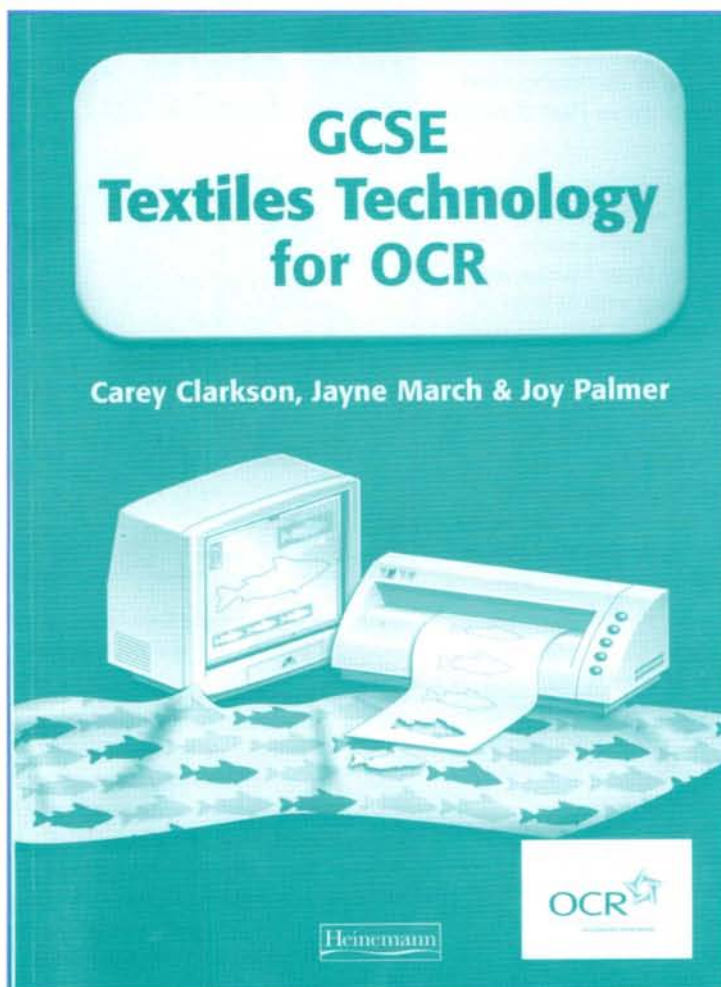
Carey Clarkson, Jane March and Joy Palmer

Heinemann Educational: £12.99

ISBN: 0-435-41666-9

Orders: 01865 888080

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



(these would be ideal for a revision aid and exam practice). The information included is up-to-date and includes the latest information on Smart Textiles, environmental considerations and use of ICT in textiles technology, such as useful web sites and Internet addresses, but teachers would have to be aware that in the ever-changing world of textiles technology this isn't likely to be 'up-to-date' for long!

Many GCSE students find industrial practice a difficult concept to understand. I feel the book covers this area particularly well with the aid of relevant diagrams and photographs; often linking the industrial examples to classroom practice. The book also makes reference to opportunities for using ICT in textiles technology work throughout. I also particularly like the Glossary and 'Further Developments' section at the end, this outlines details of what students might consider post-GCSE textiles technology and both would make ideal wall displays for the classroom. There is also reference throughout the book to the relevant design

and technology Orders covered by relevant chapters at the top of the pages.

I would suggest that this book is well worth the investment for teachers and students of the OCR syllabus. It is a clear informative guide that is well illustrated throughout and gives a clear outline of what is expected of students at GCSE textiles technology. It is ideal for its target audience, however, could also be used as a reference guide for teachers of, dare I say it, other examining boards.

European Education

Vol. 33, no. 4, Winter 2001
(Digital Learning, Challenges and Opportunities)

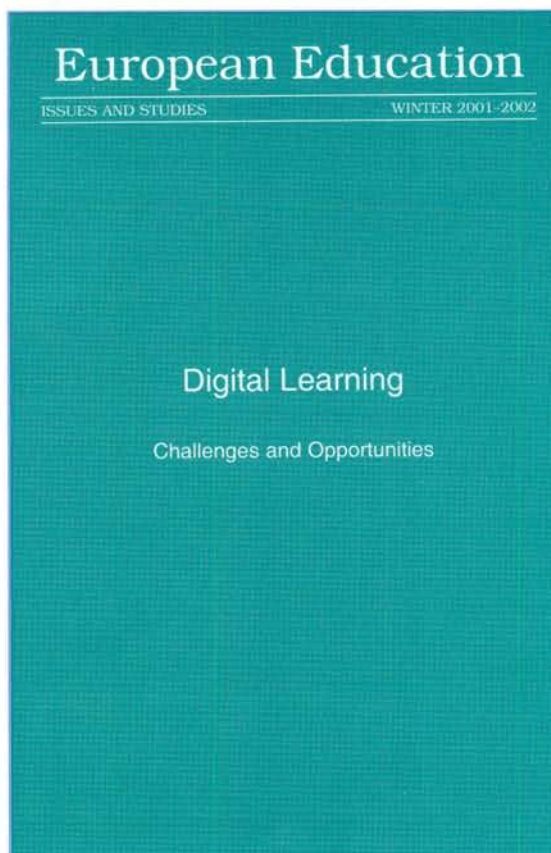
Reviewed by David Spendlove, Head of Design and Technology, Liverpool John Moores University

European Education is a quarterly publication that contains selected articles from leading European journals in addition to publishing recent research reports and documents.

The edition reviewed (Winter 2001-02) was loosely collated under the title of Digital Learning, Challenges and Opportunities. This however appears to be a tenuous title as some of the selected articles have little or nothing to do with 'digital learning'. The journal therefore fails to deliver and makes you wonder why a more discerning editorial approach was not applied. Furthermore, the quality and depth of the articles varied from superficial to good, with probably the best being a reprint of a 1999 publication from the *DATA Journal of Design and Technology Education* (Frank Banks and David Barlex, "No One Forgets a Good Teacher!" – What Do Good Teachers Know?).

The overall quality of the journal therefore appears weak, which is a surprise given the breadth of European publications it can draw upon; if this is the best in European publications on digital learning then I am surprised.

Regardless of the above, I am a huge fan of journals as they often provide the most diverse and up-to-date publications. I do not know who would subscribe to this publication (apart from University libraries) given the varying nature of its content. Taking the above into account, it is unfair to judge the quality of past and future publications based upon this one edition – I will therefore reserve judgement until convinced!



European Education

Vol. 33, no. 4, Winter 2001(Digital Learning, Challenges and Opportunities)
Edited by Hans G Lingens
Myron E Sharpe: \$9.50 (Subscription rates available at www.mesharpe.com)
ISSN: 1056 4934/2002
Orders: www.mesharpe.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	N/A
Overall style	✓✓	Cross-curricular	N/A

Chalkface Project: Design and Technology Textiles for Year 7

Reviewed by Gilly Dobson, Second In Technology, Nelson Thomlinson School, Cumbria

This book has been written to be used in conjunction with the QCA Design Technology Scheme of Work, Unit 7a (iii), Understanding Materials: Textiles. It can be used as part of a project called 'Be Seen!' where pupils design and make an accessory to wear during a sporting activity.

This is an A4 ring bound teachers' resource suitable for photocopying by the purchasing institution. This resource is good value at £25.00 because of the fact that it can be photocopied for use in the classroom. Nearly all of the worksheets are illustrated with black and white, hand drawn illustrations, which make them more visually appealing to pupils and easier to follow. The tasks at the top of each worksheet would need to be clearly explained to pupils so that they understand what is required of them during the lesson.

The book consists of 28 structured lesson plans in total with each lesson plan accompanied by its own appropriate student worksheet. Also included, is a chart at the front of the resource to show which units in the Programme of Study have been covered by each lesson. There are 12 additional photocopiable sheets also included for pupil use, these are provided as appendices in the back of the resource. Pupils can record their own findings on some of the worksheets and on all of the appendices, as they are an easily photocopied classroom resource. This might be especially useful for pupils with special educational needs.

We are told that the pages are to be followed in the order that they appear. As most schools are probably not allocated as many as 28, one-hour lessons for Year 7

Chalkface Project: Design and Technology Textiles for Year 7

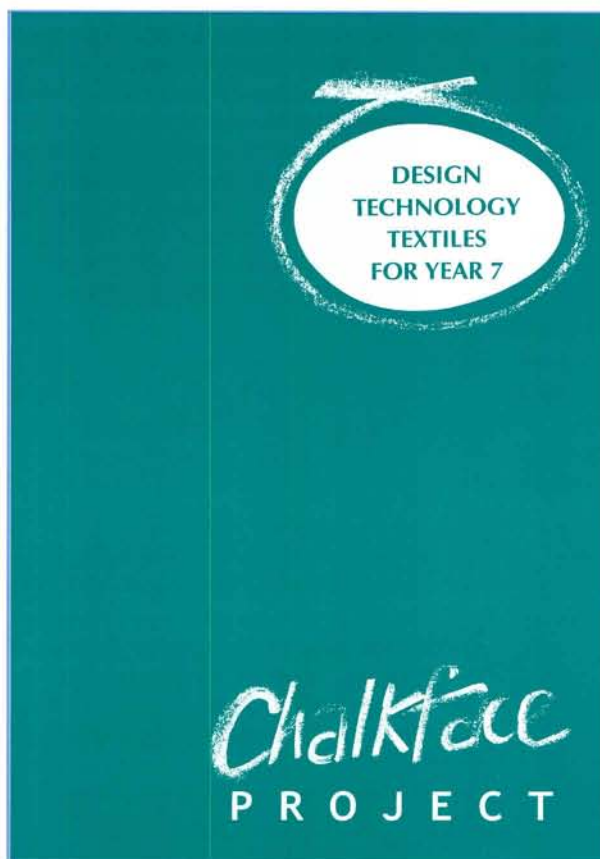
Debra Haigh and Gill Dearman

Chalkface Project: £25.00

ISBN 1-86025-399-7

Orders: 01908 340340

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



textiles teaching, some activities would need to be adapted so that they could be done in less time. Indeed, some of the work sheets could be done as homework exercises and some of the exercises could be missed out completely so the scheme does not overrun on time.

A nice additional feature is that, if pupils have access to the Internet either at home or at school, they can also log on to www.iamclever.org, where they can do their homework online and send their work directly to the teacher's homepage on the same web site for checking.

The book covers a lot of the basic textiles knowledge that most pupils would need to cover in Year 7 such as fabric construction, properties, and testing. It also covers many basic design process skills, such as evaluating and writing up specifications as well as practical making skills like seam finishes, appliqué and stencilling. There are some detailed explanations of how to do some of the various textile techniques and it is a sound basis for Year 7 textiles teaching.

The practical aim of this resource is for pupils to produce a decorated drawstring bag. Pupils, however, might enquire whether a bag would be carried during some sporting activities. An expansion

into the making of other sporting accessories might have been a helpful addition to this resource as the bag itself is very basic and does not really push pupils to consider more innovative solutions to the initial design brief. Much of the practical work covered would need to be supported with clear teacher to pupil demonstrations of the textiles techniques required to build up the pupils' practical textiles skills.

I feel that this would be a particularly good resource for teachers new to teaching textiles technology who have some knowledge of textiles and to newly qualified textiles teachers. Equally, this could be a good resource for supply teachers who may find the worksheets useful.

Teaching About Energy

Reviewed by Alan Cross, Lecturer in Primary Education, University of Manchester

This book is an excellent introduction to the area of energy and the way our use of it impacts on the environment. The book is well presented with clear sections, subheadings and diagrams. These aid the reader as many of the topics dealt with lend themselves to pictorial and diagrammatic representation. The author is obviously very familiar with the topic and with the difficulties some people have with these ideas. Explanation is clear and uses appropriate language. Links between science, design and technology and geography are clearly made, as are history and other subjects. Mathematics is not emphasised to the extent it deserves but mathematicians will find this book full of the use and application of mathematics.

The activities are divided between the seven sections of the book. The first which deals with 'Energy from the Sun' is a good example. Clear text and diagrams give sufficient background knowledge. The activities are well set out and generally look quite workable. It is important to be aware that some authors dream up activities they have never completed and which subsequently do not work in school. This does not appear to be the case with a large proportion of these models. However, some readers will find that they would prefer even more detail in the instructions. Unfortunately, no indication is given about the time required for the activities. Teachers will be only too aware of the paucity of time available. Time for preparation is an issue – as teachers, we all know the danger of basing a lesson on an untried activity, and time in the school day are at a premium.

Safety issues are highlighted by a warning symbol – this ought to have been used more often, for example, when the use of a craft knife is suggested. A theme which came across strongly was that the school

itself is a great resource for posing questions, 'What energy is used in school?' and 'Are there ways to reduce this energy consumption?'

The penultimate section gives cross-references to the National Curriculum for science, design and technology, geography, history and mathematics in England and Wales. Further cross-reference is given to the Scottish Guidelines for environmental studies. Finally, a list of related organisations is given, most of these have an associated postal address. It is hard to see the point of including others without contact details. It was surprising in a book published in 1999, to find no useful web addresses.

The book contains a huge number of ideas for activities. These include tried and tested ideas as well as some real gems which include a simple formula for working out energy being used based on step aerobics and an activity to identify the energy used to produce Greek yoghurt sold in our shops. The balance of detail given in these activities and the sheer number of them will be fine for some readers, but for those the book is targeted towards i.e. the non-specialist, the detail may be a little short in supply.

This book will be a valuable resource to teachers wishing to emphasise environmental considerations within the Key Stage 2 curriculum. The background information provided is very well targeted to teachers. The activities on the whole are good but would require careful selection in terms of how they work and the time required. A small number of photocopiable resources are provided which make a small contribution to the teaching materials one would require.

This book is easy to read, well-presented and good value at £7.95. It is produced using recycled, chlorine-free paper.

Teacher's Guide to Wind Power Projects

Teacher's Guide to Solar Electricity Projects

Teacher's Guide to Water Power Projects

These books claim to be aimed at teachers of children from 5-18. The material in them suitable for Key Stage 1 is limited but for the other key stages is much more useful. The background knowledge provided is quite comprehensive but uses some technical vocabulary.

The diagrams are clearly drawn but rarely labelled with little written explanation to assist with construction. The format of the first two of the three booklets listed above, are more useful to teachers as they give references to the National Curriculum Programme of Study, suggestions for further reading and useful organisations. Additionally, the first one on wind power goes further, suggesting questions to put to children and guides the teacher in making links to climate change. This variability detracts from the set but the publishers may be pleased to know that they are heading in the right direction.

The booklet on wind power is for its length well-written and presented although the activities lack clear explanation. However, at £4.50 the book represents good value for money.

Teaching About Energy

Clare Eastland

CAT: £7.95

ISBN 0-8574-088-2

Orders: 01654 705959

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

Teacher's Guide to Wind Power Projects

Teacher's Guide to Solar Electricity Projects

Teacher's Guide to Water Power Projects

Centre for Alternative Technology

CAT:

Orders: 01654 705959

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

The Teacher's Guide to Renewable Energy Projects: Solar Heating

Of all the publications presented for review, this one has the most background information and the least in explicit advice for the teacher. It explains terms very clearly with diagrams which assist somewhat. It makes many suggestions about activities, which might be pursued in school, and gives advice which is often of a more technical nature. Teachers using these ideas would have to be quite resourceful and confident. Of course the pupils involved could make a considerable contribution as the book rightly suggests. The most explicit recognition that these activities will occur in a school context, comes in a final page of references to the National Curriculum Programmes of Study for science, design and technology and geography. The book would be of little use to a non-specialist. However, in the hands of an enthusiast the ideas could be put to very good effect and would represent better value for money.

CAT Wind Kit

The kit includes options for six different models based on the set of components provided. The components are straightforward and would be recognisable to teachers as washers, pulleys, dowel etc. For busy non-specialist teachers, the kit is worth considering. The components slot together reasonably well. However, those who consider themselves non-technical may be a little over-faced owing to the lack of detail in the instructions.

The documentation I received, included eight photocopied pages (the front cover and list of contents are produced in colour). The six pages of guidance devoted to the models and their construction gave no hint about the age range that the kit is aimed at. I can see only the more able Key Stage 2 children being able to cope with this. Key Stage 3 and 4 pupils could be expected to have less difficulty. Unfortunately, the guidance pages are not as helpful as they might be. Teachers of design and technology appreciate that components are not always perfect. They would be rightly less sympathetic towards these ones, text and diagrams do not explain the construction stages clearly. The reproduction of the diagrams in the reviewed copy was poor and so detail was difficult to see. The diagrams were not labelled and were, on occasion, rather small. Thus a challenging set of models becomes even more so. The problem being that instructions aimed to assist, can themselves become a barrier.

The principles tackled are demonstrated well by the models: construction, harnessing the power of wind (mechanical and electrical); gearing; component (blade) design. The guidance provides useful information as background on the construction of windmills. There is reference to some of the other publications produced by the Centre for Alternative Technology and reference to a useful spares service.

The models suffered from one or two annoying problems. One model requires a screw to be fitted at the top of a post. Unfortunately, this screw is too long and blocks a hole drilled part way down the post, thus the dowel rod to be fitted through that hole does not fit. Pre-drilled holes assist the construction process, as does the fact that components fit together well.

They would provide a basis for other models and work in English, science,

maths, ICT, history and geography. The documentation which was provided in my kit, requires considerable attention so that it becomes a useful element of the kit.

At £25.00 this kit appears a little expensive for what it is. One could buy the components much more cheaply though you would lose much of the saving when you find that you have to buy some components in packs of ten or twenty. For busy teachers wanting to deal with these important areas of sustainable energy and mechanics, the time saved may be worthwhile.

The Teacher's Guide to Renewable Energy Projects: Solar Heating

Centre for Alternative Technology
 CAT: £3.00
 Orders: 01654 705959

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

CAT Wind Kit

Centre for Alternative Technology
 CAT: £25.00
 Orders: 01654 705959

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

PICmicro Microcontroller Development Board V2; Flowcode for PICmicro microcontrollers

Reviewed by Chris Snell, Consultant for Stress and Performance Engineering, Snell Eigendynamics

This review deals with one of a number of modules and products, marketed by Matrix, embracing PIC microcontroller technology and usage.

- CD ROM: Flowcode for PICmicro® microcontrollers
- 3 1/2 " floppy: PPP (PIC Parallel Programming) software and PIC development board documentation
- PICmicro® Microcontroller Development Board.

The compact but carefully annotated and laid out development board is made in the UK. The number of facilities on the board are matched by a complementary flowchart facility called *Flowcode*, which makes programming this board a straightforward exercise.

I know – as an examiner for AS design and technology Systems and Control – Sect B will increasingly demand rigorous application of flow charting protocols (as opposed to code) for PIC micro questions. A question in one of this year's AS papers asked candidates to produce a clearly labelled *flow chart*, but too many actually produced *code*. Since the factual content is defined in the syllabuses, schools can hardly afford to overlook such a topic where a candidate can gain a lot of marks so readily. This CD develops such required skills using *Flowcode* – a high level programming system based on flowcharts – allowing students to design complex robotics and control systems. Macros allow control of devices without being bogged down with the burden of detailed programming code.

PICmicro Microcontroller Development Board V2
Flowcode for PICmicro microcontrollers
 Matrix Multimedia
 Matrix Multimedia Ltd: £125.00 £39.00
 Ref: HPDEVED TEFLCST
 Orders: 0870 700 1832

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

The Help file provides a list of almost 30 tutorials to teach the use of *Flowcode*. For example, of the several hundred types of PICmicro ranging from simple 8 pin devices through to complex 40 pin devices, a demonstration using the relatively simple 18 pin PIC16F84 is given. This explains the function of the various input/output pins, reset pin, oscillator inputs etc. It shows an external RC circuit, for example, of a simple low cost solution for a clock oscillator using one of the two OSC inputs, but if a more accurate, fast clock speed is required, then a crystal/capacitor diagram using both OSC inputs is given.

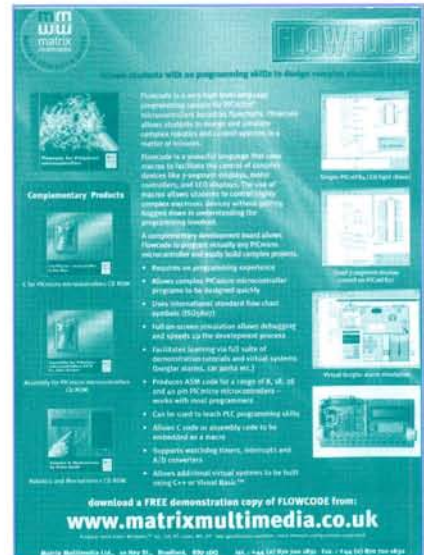
To give some idea of the of topics treated, following is a sample, varying in simplicity from lighting an LED to using embedded C and Assembly code:

- outputting a value to a port
- using variables
- performing basic calculations (and a later tutorial on advanced calculations)
- Boolean logic
- counters/seven-segment displays
- loops
- a basic light chaser (a question on one of this year's AS level papers!)
- generating sound
- analogue ports
- using macros.

Within all *Flowcode* sub-windows small buttons displaying a "?" will bring up context sensitive help for the item currently selected (pressing function key F1 will display the same help).

Once a flowchart has been designed, its behaviour is simulated in *Flowcode* before the flowchart is compiled, assembled and transferred to a PICmicro. *Flowcode* performs this through the following steps:

1. Create a new flowchart, specifying the microcontroller you wish to target (the software provides for a selection from 33 different PICs).
2. Drag and drop icons from the toolbar onto the flowchart to program the application.
3. Add external devices by clicking on buttons in the components toolbar, edit their properties, how they are



connected to the micro and call macros within the device.

4. Run the simulation to check that the application behaves as expected.
5. Transfer the application to the microcontroller by compiling the flowchart to C, then to Assembler and finally to object code.

The *Flowcode* environment consists of a main work area in which the flowchart windows are displayed, several toolbars that allow icon and components to be added to the flowchart application, three windows that allow the status of the micro and attached components to be viewed and two windows that display variables and macro calls when the flowchart is being simulated. Standard flowchart symbols are used.

Time needs to be devoted to mastering the software, as with any new tool, but the ease with which a flow chart can be assembled or edited will repay attention to this task.

There are advanced facilities for those who wish to go beyond normal classroom projects.

Acquisition of a trial disk for those who wish to explore further, or who might wish to make a comparison with Logicator, might be pursued through the web site at www.matrixmultimedia.co.uk or email to: sales@matrixmultimedia.co.uk.

Design Challenge

Reviewed by Mark Hudson, Deputy Head, Thomas Telford School, Telford

This 75-minute video contains five programmes previously transmitted in February and March of 2002 on Channel 4. Each programme involves a design challenge being set for small teams of Key Stage 3 students. The programmes observe the activities of the students as they seek out and develop solutions. The teams have a range of professional designers, manufacturers, retailers and marketing experts to consult as they develop their products.

The five 15-minute programmes each target an area within the technology curriculum.

Emergency Beacon sees a team develop an emergency beacon for hill walkers and mountaineers. It sees a combination of electronic development and CAD/CAM towards the production of a final solution.

Fashion Accessories challenges a team of students to develop an Autumn collection for a retailer. These are principally textile-based and observe the team developing their products through modelling, CAD/CAM and experimentation.

Instant Sound recounts the development of a new personal sound system based on a new technology in loudspeakers. This programme too uses CAD/CAM in a professional context as the team prototype their proposal.

Science Workstation focuses on the design and development of a portable science laboratory for student to use in the field during science studies.

Café/bar (the final programme) involves the development of a café/bar for a school tuck-shop. It involves developing the food, image, graphics and café environment.

Throughout all the programmes the emphasis is on the development of commercial products. The strategies used



by the teams to develop their specifications through direct contact with users, clients, designer and manufacturers are excellent. The clear message here is that without a clear and thoughtfully developed specification, products will not meet the needs of the user. The targeting of the product at users and user groups is also well developed through the programmes. The place of CAD/CAM and Pro/DESKTOP is profiled well. It shows how the use of CAD benefits in the refinement and modelling of proposals. Students demonstrate how CAD files are taken to a professional designer for refinement and production of models through CAM. Packaging and presentation of the product are profiled well as the need to present to clients. Evaluation in use is also developed well at the conclusion of each programme.

As a video for use with students, these programmes key strategies for developing real design solutions in real open contexts. They could be used to exemplify vital elements in a design process. Clearly, the contexts are of less value and are less likely to be repeatable as part of Key Stage 3 activities in other schools. They do, however, demonstrate what can be done when schools are able to gain the support of local contact in developing one-off projects for groups. The solutions produced by the teams show just what students given the encouragement, support and opportunity can do. Technology education at its best.

This video has a place on the shelf in any department, as an in-service activity, as inspiration to have a go at such activities and as a selectively used classroom video. I have always been a fan of video, used in moderation and as part of a structured lesson. Long may Channel 4 and others continue to produce such materials. Please!

Design Challenge

Producer/Director: Andy Walker
Handiwork Productions: £17.99 + postage
Orders: www.4learning.uk/secondary

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