

MAPE Newsletter

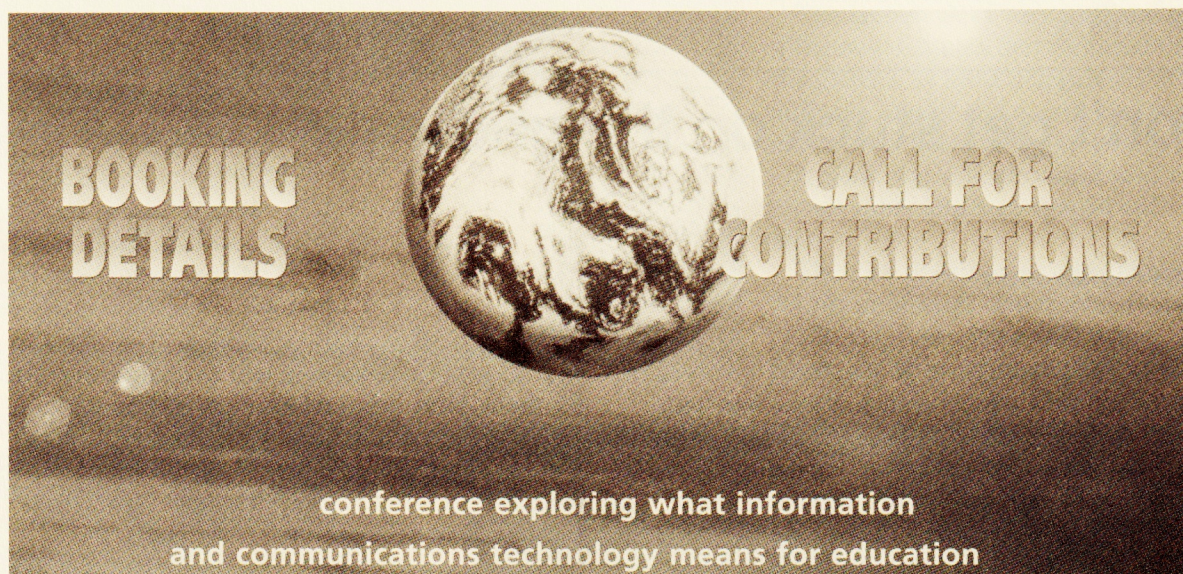
Summer Term 2000

Newman College with MAPE

- ▶ Integrating ICT
- ▶ *Maths in Motion*
- ▶ 10 tips for using *Word*
- ▶ *Maths-U* at the House of Lords

Educating for the 3rd millennium

A conference at Cheltenham and Gloucester College of Higher Education 13–16 July 2000



This promises to be a very exciting conference; among the keynote speakers will be Prof. Tim Brighouse and Gabriel Goldstein. There will be ample opportunity to meet and discuss current issues with other primary colleagues, as well as to attend workshops and presentations addressing such aspects of primary practice as management, inclusion, learning environments and classroom case studies. There will also be a major exhibition giving everyone a chance to find out what's available.

Of particular interest to MAPE members will be a presentation by Martin Ford on Sir Henry Unton.

It was Martin who first suggested to us that Sir Henry Unton would be an interesting subject for a History Focus, and he kindly made his extensive resources available to us when the material for the CD was in preparation.

What conference would be complete without a MAPE Barn Dance? This will be held on the Friday evening, and on Saturday the after dinner speaker is Gervaise Phinn.

There is a day delegate rate of £24 available to those unable to attend the whole conference.

For further information see

www.itnetwork.org.uk/conf2k.htm

2001 ICT in Practice Awards

Next January at the BETT show the first BECTa TES awards sponsored by BT will be presented by Lord David Puttnam. The awards, covering England, Scotland, Wales and Northern Ireland, are to promote and reward exemplary ICT practice amongst teachers, lecturers, trainers and advisors. A second aim is to discover practice that can be widely emulated.

Each award winner will receive £2500, with an additional £2500 going to their school or organisation. They will also agree to their work being widely publicised. The practice can take the form of doing traditional things in new and better ways or of expanding the boundaries of what is possible. The awards will reward practice that is replicable, that will say to teachers, "you too can do this".

These are the categories:

- *ICT in Practice: School Management (Primary and Secondary)*
- *ICT in Practice: Special Educational Needs (Primary and Secondary)*
- *ICT in Practice: Subject Teaching (Primary and Secondary)*

- *ICT in Practice: Advice and Support*
- *ICT in Practice in FE: Widening Participation in Further Education*

The judges will look for candidates who have:

- commitment to the use of ICT for teaching and learning;
- an understanding of how work has contributed to raising standards;
- the ability to inspire and motivate students and colleagues;
- visionary and sustainable ongoing plans.

Candidates for the awards have to be nominated. The process is explained on the BECTa site which is open for nominations now. The closing date is 28 July 2000. Short-listing will take place immediately after that and short-listed candidates will be visited by the judges during the autumn term.

www.becta.org.uk/practicewards

Any queries should be sent to:

practiceawards@becta.org.uk

Don't get stuck on the grid!

Brian Richardson
CSH

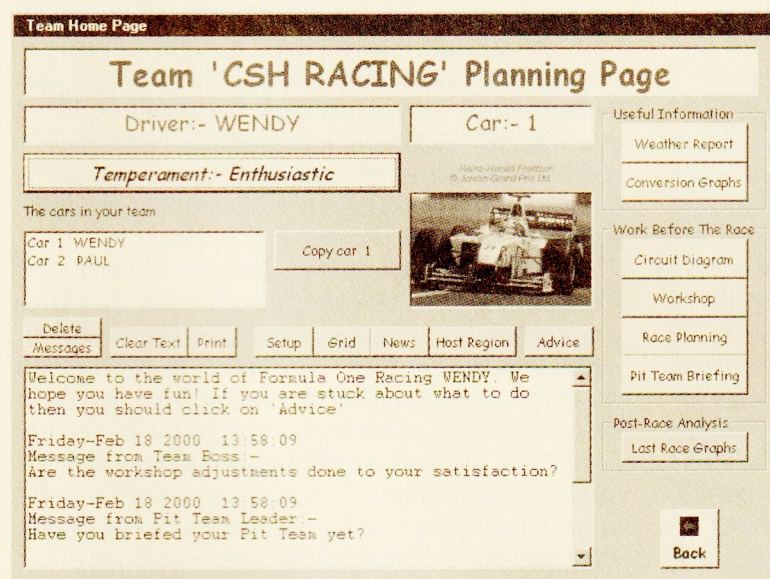
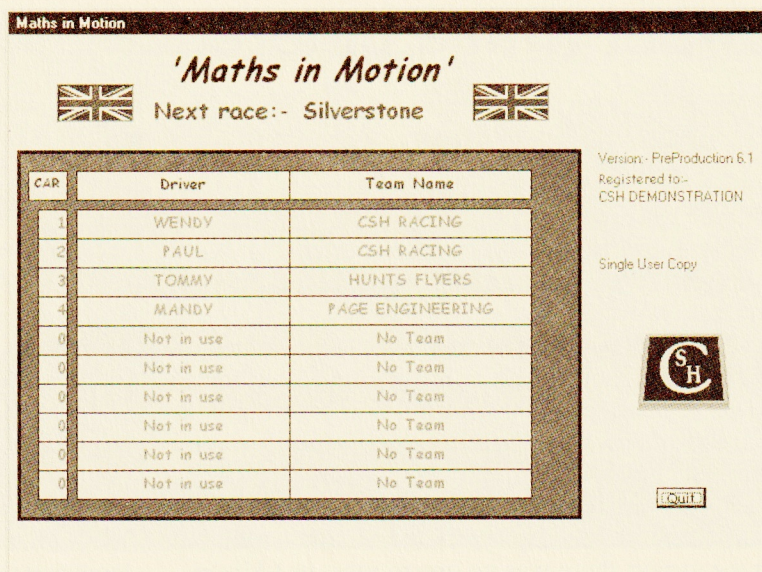
Looking back to the early 1980s, being involved in the production of educational software was both exciting and innovative and, I have to say, it was probably a bit hit and miss! No one really knew what we should be doing with computers in our schools, let alone what software we should be producing, yet everybody seemed to have a model theory of their own. Teachers who were lucky enough to have computers in their classrooms experimented with all kinds of software and generally they were exciting times.

In 1984, we at Cambridgeshire Software House published a program entitled *Cars – Maths in Motion* and launched it at that year's MAPE Conference. Since starting our fledgling company some 4 years earlier, we had produced about 20 programs and were becoming well known for our simulations (*Expedition to Saqqara*, *Adventure Island*, *Mary Rose* etc.). At the time, some teachers were a little wary of using this type of software, mostly through 'fear of the unknown', but '*Cars*',

as it soon became known, was to change everything for them. Here was a cross-curricular simulation, based in the exciting world of Grand Prix racing, that heavily featured practical mathematics and that the children actually enjoyed using! Apart from helping them to learn some basic skills, the software showed children that mathematics could be fun and 17 years later, the rest, as they say, is history! The program became the most popular cross-curricular simulation ever and many an in-service training course from Winchester to Aberdeen finished with teachers screaming at a 14" monitor in the hope that it would make their car go faster!

The software has undergone little change since its original publication and has, until now, only been reprogrammed by us to cater for new operating systems. However, that has now all changed. With 'Maths Year 2000' in mind, we started over 2 years ago to completely redesign the program. We wanted to put in some of your suggestions and make the software even more relevant to the

teaching methods of today. I am very pleased to say that we showed the new version at the recent NAACE Conference in Blackpool. I make no apology for the fact that children will still need to use protractors, will still need to use scale, will still need to calculate percentages and will still have the opportunity to experiment with the mathematical model. Children will be able to ask 'what happens if . . . ?', 'what chance shall we take . . . ?' etc. when using this software and they will experience the use of ratios, measuring angles, strategy, speed, time, bar, line and conversion graphs whilst attempting to set up a car to win a race. As an aside, we have a very useful support document on our web site



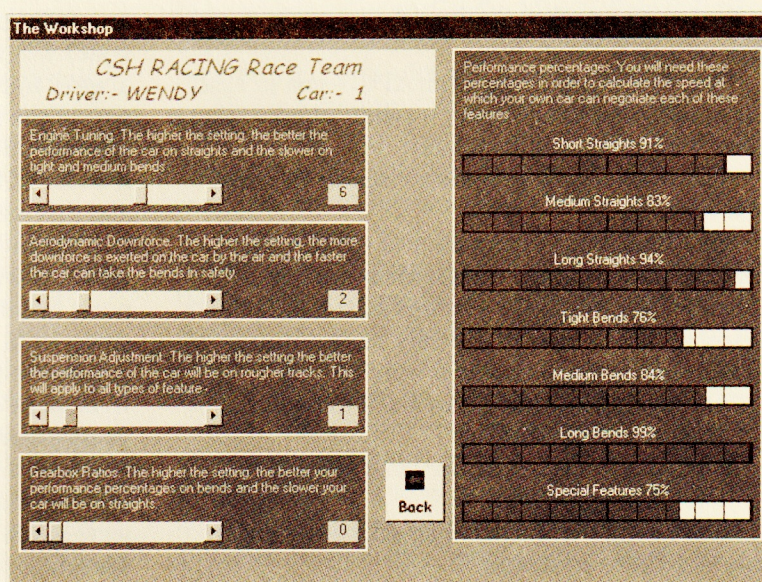
(<http://ourworld.compuserve.com/homepages/cshsoft>) which details the parts of the Numeracy Document where the program covers various aspects of it for Years 5, 6, 7 and 8. We have also listed the parts of the Scottish 5-14 Guidelines that are covered by the program.

The launch went very well and one of the new features that captured the imagination of most delegates is the ability to import and export cars from and to other users of the software. This will mean that schools could send cars to each other and race against each other.

The new program is called simply 'Maths in Motion' and is available on CD-ROM. It is compatible with Windows '95 and '98 and costs £49.95

+ carriage and VAT, direct from us at the address below. I know from correspondence that many teachers still use what is now the old software to help deliver the various curricula requirements in their schools. I am therefore pleased to tell you that if a school returns to us the original package, track plans and discs, then that school can purchase the new program for only £30.00 + carriage and VAT. This offer will be open for a very limited period only.

CSH can be contacted at:
Cambridgeshire Software House, P.O.
Box 163, Huntingdon, Cambridgeshire
PE28 3UR
Tel: 01487 741223; Fax: 01487 741213



In-Set with a difference!

Roger Keeling

*Roger Keeling is head of Maths and IT at Newman College
r.keeling@newman.ac.uk*

It seemed a good idea at the time – to go out to Beirut for a short break in the autumn reading week to see my daughter (Alison). We had been out there 12 months ago so we knew what to expect – a once modern Middle Eastern city ravaged by years of civil war but rapidly undergoing reconstruction. This time, the journey out there was uneventful but at the airport there was no one to meet us (Alison has spent all her life being late – what's new?). We sat around waiting, exhibiting our typically English trademark – three coats on in temperatures that were in the mid 20s.

The following morning we were woken by the kids playing at the school adjacent to Alison's flat (at 7.30!!) But there we were, November 1st, and the kids, in short-sleeved shirts, were playing out in the playground; basketball, volleyball and football all happening simultaneously. This was a far cry from the teachers back home whose hearts sink every time someone declares yet again that it is a wet break.

However this trip had taken on a different complexion. The Embassy where Alison works had given some 486 PCs to some of the poorer schools in Southern Lebanon and suggested that I might like to go down there to show the teachers how best to use them. In a moment of weakness I said 'yes' – it was all due to be very low key. "By the way dad, it's in the war zone" – Israel has annexed a 15 mile strip of Lebanese land to keep the Hezbollah guerrillas at bay but they keep having a go at each other.

Each time I spoke to Alison the low-key event took on a new twist:

"We'll take you down in an APC – just in case" (Armored Personnel Carrier – I didn't know what it stood for either), and then later:

"The two schools have now risen to six", and next time:

"The Ghanaian Commander of the UNIFIL Force (United Nations Implementation Force in Lebanon) will welcome you and take you to lunch" (warning bells – I normally only have a banana butty at lunchtime!) and so it went on . . .

"The six schools have now risen to twelve . . ."

"The press will be there."

"The 12 schools have now risen to 20 . . ."

"The TV may be there."

"It is taking place in the barracks but there is only one demo computer."

"Not all the teachers will speak English."

"We will have to leave at 6 in the morning to get there for an 8.30 start."

Stop! Stop! This is all getting out of hand. Time to press the panic button and abort the mission – but that may have reflected badly on Alison. Trapped!! I normally enjoy taking in-service sessions, but that is when I know what to expect. This is different. The language is different, the number system is different, books start at the back page, and text reads from right to left. What will they make of FD 60 RT 90 (Logo). Additionally, Alison and my wife will both be in the audience – now I don't mind lecturing to students and teachers but kith and kin are a different matter – rather worse than Ofsted. My only consolation was that I was as well prepared as I have ever been (but for those who know me that doesn't say a lot!). However thanks to Dr. Nakeeb I did have a couple of handouts translated into Arabic.

We left Beirut at 6 in the morning and were driven to the UNIFIL Compound in Tyre. The drive was uneventful if you forgot to count the checkpoints that we drove through. We were greeted by the Ghanaian Colonel of the base and the Indian Lieutenant Colonel who is the UNIFIL Humanitarian Officer. We also met two nuns (the first of the teachers on the course). The nuns taught very close to the Israeli border at En Naqoura in the occupied zone and had to be brought to Tyre by UNIFIL – the only way to guarantee their safety, but they walked across the compound to greet us and presented us with a warm breakfast (Lebanese style) wrapped in tin foil. Throughout the day we always found the same warm hospitality. The first part of the schedule was a visit to the primary school in Silaa. Problem – the Ghanaian Commander of the main base wanted to meet us first and this was a half-hour drive away. We drove up into the hills to a small village called Kfar Dounine which is where the base is positioned – a village of porta cabins etc. that the Ghanaians have occupied since 1978. In fact the UNIFIL force has comprised battalions of Ghanaians, Fijians, Nepalese, Finnish, Irish and Poles and has been there for nearly 22 years (so much for the concept of an interim force). However if the Ghanaian Commander wished to see us, who were we to argue – he has tanks!! We were given a warm welcome, the usual drinks, speeches, etc., before setting off again in convoy to visit the primary school, to whom the Embassy

were donating a brand new printer. This was a village school of some 320 pupils set in the mountains. The pupils were smartly dressed in their uniforms and generally overawed by the presence of two British teachers, an Embassy delegate, four journalists, and at least 6 soldiers, two of whom were filming the whole event. But even here, in the mountains of Southern Lebanon in occupied territory, these children were learning English. In this part of the world this was quite unusual as children of this age usually learn French as their second language. Formalities completed, and amidst smiles and waves from a class of young children, we headed back to the barracks. By this time the rest of the teachers had arrived and were seated and ready to go. The army had, in fact, borrowed six computers from the desks of soldiers to make it a hands-on session and had set up a demo machine with an LCD panel on the OHP projector – but by the looks of it the OHP had a 40 watt bulb in it rather than a 400 watt bulb!

First problem – my laptop would not interface with their projector, or at least the top half of the screen would but not the bottom half. This did not look promising. However after some fiddling we managed to get started. But first there were more speeches. The Commander of the base was first, Alison, on behalf of the Embassy, went next and the UNIFIL Humanitarian Officer was next – the net effect of all this was that a 2-hour session was reduced to 1 hour.

I'll not bore you with the details of the course other than to say that we tried to cover some maths software and some programs to support the teaching of the English language. We did manage to run a hands-on session, but when you 'borrow' six PCs from the desks of officers, and then try to install software on to the hard disks without understanding the security that these officers have implemented to protect their own systems, suffice it to say that it is not without its frustrations. Lunch was in the Officer's Mess and was typical Ghanaian food (what happened to vegetarianism?) – however, the general hospitality was absolutely superb and everyone was most kind and helpful.

But what did the teachers learn? The problem with this type of initiative is that it requires two things to happen. One is a support person in the neighbourhood of the schools, particularly someone who can solve the technical problems, and secondly it requires the teachers themselves to form a self-help network – not only to exchange the solutions to technical problems but also to exchange ideas as to



Posing in UN gear.


how they have used different programs. It is too early to say whether this will happen, but we did identify a couple of people who might be 'movers'.

After taking a few photographs, posing in UN gear, we were taken to a Palestinian Refugee Camp and taken round by a British physiotherapist who has been working out there for a couple of years. This is the most depressing place that can be imagined. These camps are not tented villages; they are generally brick built but with little sanitation and running water. They are virtually self-supporting in that there are shops, schools etc. but basically no opportunities. The residents are strictly forbidden from improving their homes – because they are only temporary residences (albeit for the last 40+ years) and employment chances are very low – and even when some do get employment, it is only in the most menial of jobs. Although the question of the Palestinian Refugee Camps needs to be addressed as part of the Middle East Solution, expectations of a better future are next to nil – just how do you cope with a homeless nation?

This is a country full of contrasts. Some Lebanese are very well off, as is evidenced by the cars they drive (although the way they drive them is an entirely different story!) On the way to Tyre we drove along 'our' side of the motorway, but as the opposite direction was congested (northbound) they simply swapped sides and started driving north down the southbound lane! At the end of the day we spent the evening in Tyre and dined in an open-air café right by the side of the Mediterranean. It was a warm evening and we could sit, drink wine and watch the fish. However we also sat there listening to gunfire and spotting the occasional flash in the distant hills. No one took any notice – probably bored soldiers trying to liven up their evening!

Ten tips for using *Word* for your own productivity

1	Use Tables	<ul style="list-style-type: none"> • Tables are very valuable whenever you want to arrange things in rows and columns or put things into boxes. This layout was originally created using the Table function and any worksheet with questions and answers can be laid out quickly and easily using Table. • The best way to find out what is possible is to explore the Table menu on your menu bar. • You can change the width of columns by simply dragging the lines. • Explore the Table Autoformat options (in the Table menu) to see loads of different ways of presenting the work. The simplest layout is 'Grid 1'.
2	Use Bullets	<ul style="list-style-type: none"> • The Format menu gives you many options for using Bullets and Numbering. • You can bullet ordinary text or you can use bullets and numbering within a table as I have done here. • This box is bulleted and the first column of this table uses numbered items. To use different types of bullets for different columns in the table, first make sure the cursor is in the column you want to set, and choose Select Column from the Table menu. This will highlight the column. Now choose Bullets and Numbering from the format menu and set the option you require. • Numbers are adjusted automatically. This means that if I decide to add or delete rows in my table the items in the first column will be renumbered accordingly.
3	Check your spelling and grammar as you type	<ul style="list-style-type: none"> • Choose options from the Tools menu, click on the Spelling and Grammar tag and tick the boxes to check spelling and grammar as you type. • Whenever you make a spelling error the word will be underlined in red. Click on the word with the right hand mouse button to see alternatives and select the one you want. • If you have spelt the word correctly you can add it to the dictionary with the Add option. • If the grammar you have used is deemed incorrect the text will be underlined in green. This happens if you type monstrously long sentences for example. Sometimes it can be irritating to be told the work is ungrammatical when it is the way you want it! You may wish to turn this option off.
4	Use Autocorrect	<ul style="list-style-type: none"> • The AutoCorrect option in the Tools menu can be set to correct all your typos automatically without even asking you. Moreover it can learn the mistakes you make regularly and deal with these for you. I am a pretty mediocre typist and often transpose letters – my machine puts them all right for me and I do not even know I have made the error! This is very ego boosting. • Explore the AutoCorrect option in the Tools menu and tick the options you want to work with. • You will see a long list of the autocorrections which are already built in. • When using the above option, which checks your spelling as you type, you can add words to the AutoCorrect menu. Click on the word with the right hand mouse button as before but now choose AutoCorrect. The options will be presented again and as you choose the right one the autocorrection will be automatically added to the list.
5	Use text Frames	<ul style="list-style-type: none"> • Sometimes you want to create a worksheet or template with clearly defined areas for text to be entered. A good way to do this is to use text frames within your document. • The Drawing toolbar may already be showing – it is the bar which says Draw at the left hand end. If it is not – select Toolbars from the View menu and choose the Drawing toolbar. • One of the items on this toolbar looks like a page of lines with a letter A in the top left. Click on this and the cursor will change to a cross and allow you to create a text frame in your document. • This frame can be manipulated like a picture frame – repositioned, stretched, etc. • Text inside the frame can be altered using the normal formatting tools. • The template for an Annual Record of Achievement (available on the MAPE website www.mape.org.uk) has been set up using text frames.

6	Use Change Case	<ul style="list-style-type: none"> You know how frustrating it is when you accidentally hit the caps lock key and type three lines without noticing that it's all in capitals? Well this can be put right simply using the Change Case option in the Format menu. Explore the various options. Upper case can be changed to sentence case – a capital will be used to start a sentence.
7	Add illustrations 	<ul style="list-style-type: none"> If you have a fairly up-to-date version of <i>Word</i> (eg <i>Word97</i>) you really do not need a programme such as <i>Publisher</i> as you can easily mix text and graphics on <i>Word</i> pages. You can use clip art, as I have done here, or pictures created in other packages and stored as files. From the Insert menu choose Picture and then whether you want to use clipart or a file. Try things out with clipart to begin with. Choose the image you want and click on Insert. The image will probably not be exactly the right size or where you want it but this is easy to correct. When the image appears in your document the Picture Toolbar may well appear at the same time. If it does not choose Toolbars, then Picture from the View menu. The first thing to do is to make your picture float freely over the text so that you can move it where you like without messing up the text. For this use the wrap tool (a yellow diamond on a square ruled with lines). Click on the picture to select it (you will see the little square handles all around it) and then on the wrap tool and choose None. You can now move the picture around without changing anything else. Different kinds of wrap can be useful – you will need to experiment with them to see what they do. To resize the picture click on one of the handles and pull. A diagonal pull on the bottom right handle will resize while keeping the original length/width ratio. It is worth exploring the rest of the Picture Tools – the clip tool (looks like two Xs) is handy for shaving bits off.
8	Open straight into your document	<ul style="list-style-type: none"> The quickest way to open a document which you have recently been working on is to use the Windows Start button. Choose Documents from the Start menu and you will see that the last 15 documents you have worked on are all listed. Click on the one you want and it will open straight away. (Not strictly a <i>Word</i> tip this as it is Windows which does this for you.)
9	Avoid inappropriate line breaks	<ul style="list-style-type: none"> Sometimes you put two words together (or more often perhaps a word and a number) which are not hyphenated but which nonetheless need to stay together to make sense – 'Year 6', for example, or 'Class 7'. A line break between the word 'Year' and the number '6' both looks odd and makes your text hard to read. To keep things together you need to use a 'nonbreaking space' instead of an ordinary space between them. To enter a nonbreaking space simply press Ctrl, Shift, Spacebar. What appears looks just like a normal space but will not break over the end of a line.
10	Buy yourself a copy of WORD for DUMMIES	<ul style="list-style-type: none"> Do you know of the 'for DUMMIES' series of books on all sorts of computer matters? They are comprehensive manuals written in a friendly and chatty style which is both readable and accessible. Typical titles are 'Internet for Dummies', 'Windows98 for Dummies' etc. There are loads of versions of 'WORD for Dummies' – get the one which matches your version of <i>Word</i> (eg mine is WORD97). The books can be found in computer shops like PC World or ordinary bookshops. They are easily spotted as shelves of bright yellow tomes! They are not cheap (my 'WORD97 for Dummies' cost £18.99) but they are well worth the money.

The Chris Robson Memorial Prize 1998

Nick Packard and Sally Smith judged this year's competition

Picking the 'best' from everything published by MAPE during 1998 was no mean feat! In total we read over 50 articles, tackling a broad range of issues (and an even broader range of interesting and creative solutions) related to the use of ICT with primary age children. Being judges gave us the perfect excuse to really pore over all this work, and we would like to thank everyone who submitted articles to MAPE Publications last year.

In the end, we chose 'Putting *Hyperstudio* to the test' by Steve Bailey as the winner of the Chris Robson Memorial Prize for 1998. As the ICT Coordinator of Paulton Junior School, Steve took on an ambitious project – the development of a 'Computer Prospectus' for the school using the multimedia program, *Hyperstudio*. This project allowed members of the whole school to get involved, it spanned age groups, types of software, abilities and interests, and it had a real purpose and a real audience to cater for.

If the time and effort involved in putting the whole thing together wasn't enough, Steve then wrote an article describing the project, from conception to presentation, for the *MAPE Focus on Art Pack*, published during the Summer of 1998. There were plenty of 'gems' in this piece, little teaching points, organisational tips, potential pitfalls and their solutions that might help other

MAPE readers to learn from his experiences.

Well done and thanks, Steve!

As last year's winner of the prize I know the encouragement it can give to a classroom teacher and I offer my congratulations to Steve. Reading his article I felt I could use his ideas in my school. Reading a whole year's articles in a short period of time has given me a wealth of ideas and renewed an enthusiasm for ICT. Discovering what others have been doing in their classrooms is a special encouragement. With the literacy and numeracy strategies dominating our thoughts it is especially interesting to have ideas from other teachers to use in our classrooms, so whatever ICT is happening in your room we would like to hear (you never know; you might become a prizewinner).

Sally Smith

The Chris Robson Memorial Prize (£200) is awarded annually to the writer of the best article on classroom practice from the previous year's publications. It commemorates a former publications editor and MAPE stalwart, Chris Robson, who died of breast cancer in 1995.

A day to remember

Rhona Dick

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On 27th January Janice Staines, Sue O'Brien and I took the train to London.

No we weren't skiving, or off for a day's shopping, we were among the fortunate who'd received an invitation from Valiant Technology to the unveiling of their latest piece of educational equipment, *Math-U*. Dressed in our finery we made our way to the venue; no ordinary launch this, it was to take place at the House of Lords.

The Houses of Parliament are not as old as they'd have us believe. Largely rebuilt in the 19th Century following a catastrophic fire, they are

presently undergoing something of a face-lift, and some of the courtyards are shrouded in tarpaulins. Despite this the delicacy of the carving on the honey-coloured stone is breathtaking.

The Cholmondley Room is a long, narrow chamber. Benefiting from almost no natural light the dark green wallpaper lends an atmosphere of gloomy solemnity a feeling reinforced by the oil portraits of the great and the good that adorn the walls.

We were welcomed by Kate Hudson and Gill Manvell of Valiant Technology, and ushered



through to the enclosed terrace overlooking the River Thames.

The portcullis motif on the scarlet plush arm-chairs was echoed on the etched glass doors to the terrace. The weather was perfect, clear, bright and very cold, making our view out over the river almost dazzling. To the east we could see the London Eye, then sadly still motionless, and to the

west the grey stone of Lambeth Palace.

Glasses of wine were replenished regularly and the alcohol was soaked up by the most delicious and delicate little canapés.

After being welcomed by Baroness Goudie, Dave Catlin, Managing Director of Valiant Technology introduced *Math-U* to the assembled crowd.

In brief, *Math-U* is a Maths unit that acts as a satellite to your computer. Up to a term's work can be downloaded and pupils can then use it at their desks or even take it home. The design of the unit is very child friendly – it has the appearance of a games console.

Many consultants have been involved with *Math-U*'s creation, and it is a testament to Valiant's commitment to quality that so many appropriate specialists were appointed to collaborate on this project.

Everyone was given the opportunity for some hands-on as several *Math-U*s put in an appearance around the room. The general consensus of opinion was that *Math-U* has a lot going for him.

Eventually it was time to leave this unique venue, but the three of us had had a day to remember.

A report, following a survey of IT in local primary schools, by BEd Year I students in November 1998

Cliff Warner

Lecturer in the School of Education at Derby University

Background

Computers were first introduced into primary schools in this locality in 1981. These were BBC model B machines and programs loaded by cassette tape player. This was a tedious and often a frustratingly unsuccessful process. Within months schools were provided with new 'disc-drives' with 5¼" floppy discs. Loading programs became very easy and the use of computers became commonplace with most teachers, but using a very limited range of mainly 'drill and practise' type programs. BBC Master computers arrived during 1984 and this meant an almost identical computer, but with a larger RAM memory, now allowed a wider range of enhanced software to be used in schools. Locally, schools started to use Logo and the original *PenDown*.

In 1988 schools began to purchase new Acorn

machines, firstly the Archimedes, later on A3000, A4000/ 5000, until in 1994 RISC PCs and A7000s, both with CD-ROM drives, became available and the latter, at present, being the most popular machine purchased throughout Britain for educational usage.

Unlike other curriculum areas, ICT is not just a subject in its own right but also a tool used to enhance and support the whole curriculum. In view of the fact that ICT is a relatively recent addition to the curriculum, there exists less expertise amongst teachers than is the case for the longer established subjects. This can also point to there being potentially less confidence in the teaching and provision of ICT in some schools.

There have been over the last 16 years in schools 'waves' of enthusiasm for ICT, often coinciding with the launch of 'new technology'. The introduction of the National Curriculum in 1988 raised

awareness of the concepts of Information Technology, but little more was being done in many schools than had been achieved in 1985. Some schools have doggedly kept up their ICT development in line with the National Curriculum requirements, but, sadly, our students' survey tends to suggest that this is not widely evident. Perhaps we already suspected this to be the case!

BEd Year 1 IT survey

In conducting this survey we are attempting to ascertain to what extent the Statutory Orders for Information Technology (DFE (1995)), are being implemented in local schools. These indications, evidenced in our survey, will be used to inform our planning of future in-service courses offered to local schools by the IT (Education) staff at the University of Derby.

The survey was conducted by BEd Year 1 students on visiting their placement schools for School Experience. The observations made by the students formed part of an assignment in Educational Learning skills and Information Technology. A total of 143 students visited the local schools and they were given strict instructions to *observe*, rather than *interrogate*, in order to compile the information. No individual school has been identified and no judgement or comment is therefore made about any individual school.

- At Key stage 1:
'Pupils should be taught to use equipment and software confidently and purposefully to communicate and handle information, and to support their problem solving, recording and expressive work.' – DFE (1995)
- At Key stage 2:
'Pupils should be taught to extend the range of IT tools that they use for communication, investigate and control; become discerning in their use of IT; select information, sources and media for their suitability for purpose; and assess the value of IT in their working practices.' – DFE (1995).

In order to encourage a wider use of relevant IT usage in our local schools and so help our students to develop even more 'comfort' in the introduction of ALL the strands of IT competence, we perceive a need

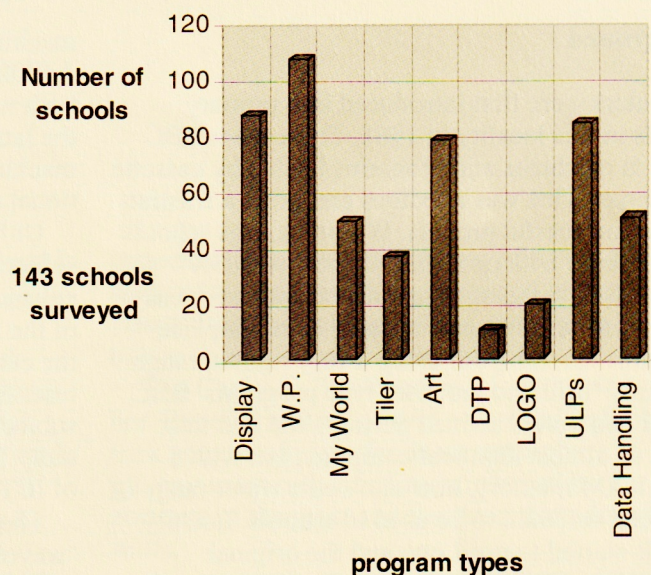
to provide a wide range of in-service opportunities for serving and newly qualified members of the profession. We see these as ranging from quite basic courses to the less popular areas of Control and Modelling. These would complement any training initiatives being used by Derbyshire and our neighbouring LEAs.

Some evidence disclosed by the survey, we understand, may be duplicated because all of the schools remained anonymous and we are aware that one or two schools will have more than one student placed with them. This may give rise to very small variations in the percentages quoted.

Some causes for concern in the use of IT which have been highlighted by the survey:

- Much 'drill and practise' work is still being used with programs such as *Granny's Garden*, *Bottles*, *Mickey* and other programs similar to the original Anita Straker series circa 1984. This was evidenced in 59% of the schools. These are referred to as ULPs (useful little programs) in the graph to show the use of specific programs.
- Wordprocessing programs, being the main usage of IT in schools (75%), are being used to produce 'best copy' of stories, topic reports etc. first written by hand on paper instead of with an original/creative writing tool, hence WP skills of drafting and editing are not being taught.
- Despite a very high incidence of printers in schools (98%), surprisingly a lower than expected amount of display was seen to be recorded; only 61% had any form of IT in their school displays. Many schools had a few

Graph to show the use of specific program types and Display using IT



printers available, either colour and/or black and white, but few had one connected to every computer. There appeared to be far fewer printers in most schools than the total number of computers. A few schools did not have the correct 'printer drivers' to enable the printers to be used and there was one school which had at least one printer which they were unable to configure or connect to the computer.

- Framework programs such as *My World* are being used in the 'as is' state rather than creating screens to address specific teaching points and children's needs. 34% are recorded as using *My World* at some time.
- Few instances of modelling other than Logo and adventure games were found, but of the 13% which showed evidence of Logo-type programs, half of these were in schools whose main type of computer was RM Nimbus. This suggests that only a small proportion (3%) of 'Acorn-main' schools actively use turtle graphics programs!
- Only 35% of the schools had any evidence that information handling packages were used at all and these tended to be in the schools whose main computer type was Acorn.
- Alternative input devices e.g. CLICKER or concept keyboards appear to be underused, especially with special needs groups.
- No evidence of sensors or control devices was recorded.
- Despite the range of CD-Roms available only the encyclopaedia-specific ones seem to be used regularly.
- There was evidence of undirected use of a computer at the end of sessions to 'entertain' children who had finished all their work!

- 10% of the schools had a designated and time-tabled computer room/area; it may be therefore assumed that the majority of schools use their IT equipment within the classroom environment, with small groups on perhaps one or two computers.

In all the schools we surveyed the use of the Acorn series of computers was by far the most prevalent. The Derbyshire Authority and Derby City support both Acorn and PC use, but it would seem that the majority of educational software is available in the Acorn format, some programs exclusively. Of the schools which we found to be currently using Acorns, 24% of these machines had CD-Rom drives.

Following recent Ofsted inspections, several local primary schools have acknowledged the advice that their IT provision within the framework of the National Curriculum is in need of some additional attention. To an extent this view is supported by the finding of our survey. It is clear that to implement some of the features of the Orders, Monitoring and Control, for example, extra equipment may be needed and this of course has ramifications for the overall budgetary considerations within the provision of the Curriculum.

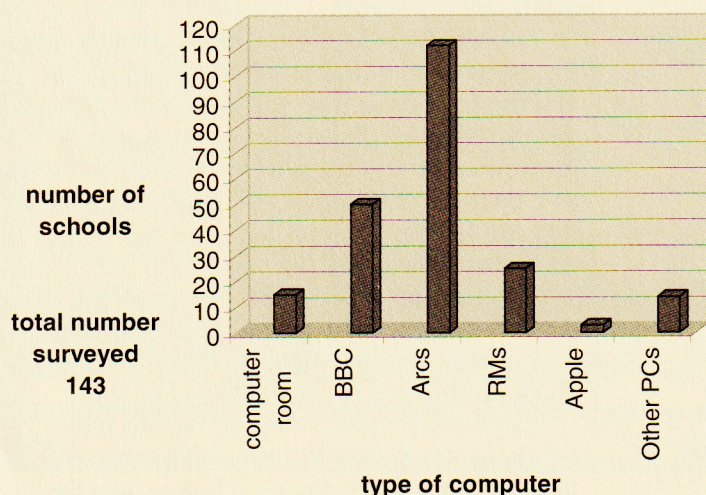
Update

During the past year, further information has been sought with regard to the number of schools that have a 'connection' to the Internet. This is a constantly changing situation, almost on a weekly basis, but during Autumn term 1999 our observed schools showed that all the connections were completed. However, in some cases the schools reported having all the 'equipment' and connections but not, as yet, having the 'kit' configured for Internet usage. Of all the schools, 36% have received training on their use of the Internet; 19% said they had begun to use the web with the children. Of the ones which are at the moment connected 12% have been allocated an email address and are using it to some extent.

Reference

DFE (1995) – Key Stages 1 and 2 of the National Curriculum, HMSO, London.

Graph showing types of computers in surveyed schools



Reviews

Ideas for integrating ICT into the primary and secondary classrooms

Lewisham Education and Community Services
edited by Gill Deadman, 1999
Price: £4.00

This book of materials has been developed by teachers in response to specific needs identified by teachers themselves. The teachers wanted ideas for:

- integrating Literacy, Numeracy and ICT in the primary classroom;
- developing the control strand of the IT National Curriculum which is currently poorly covered in many primary schools;
- making effective use of Internet and email throughout the curriculum to enhance teaching and learning.

The book contains 24 distinct activities, each of which is clearly and attractively presented in full colour on a double page spread. The wide ranging nature of these activities (they cover Reception up to Year 9) means that the book is likely to be of particular interest as a source book for ICT coordinators who are developing schemes of work for their schools. Subjects covered are the use of floor turtles and screen logo, datalogging, databases, multimedia authoring, email, creating web pages and using the Internet for research. All the activities make use of generic software and should thus be accessible by any school (two of them use Microworlds *Geoboards* – Logo-based activities which can be downloaded free of charge from the LCSI website www.microworlds.com/library/math/index.html).

Copious illustration makes the book very 'browsable' and the page layout makes it easy to understand each activity at a glance with headings such as: Context (Pupils' prior experience); Task description; Learning intentions; Teaching approach; Links with other curriculum areas; and Form of assessment.

Examples of pupils' work and teacher evaluations are shown and I particularly like the teachers' assessment (with reasons) of the levels of attainment shown by pupils in some of the activities. This should be helpful for whole-school training sessions on levelling.

At the back of the book are a number of pro formas for activity planning, assessment and evaluation. There are also some Computer diaries for children to complete (a separate one for KS1, 2 and 3). All of these materials can be freely copied

for school use and are also available in electronic form from the Lewisham ICT Centre website www.lewisham-pdc.org.uk.

This is a useful and attractive resource book. Congratulations to the team of classroom teachers, ICT coordinators and advisory teachers who produced it.

Heather Govier

BBC Maths Workshop – Number

Longman Logotron

CD-Rom for Windows and Macintosh

Minimum requirements:

Windows 95/98/NT 16 MB RAM

Power Macintosh 16MB RAM

Price: £49 (excluding VAT) for a single user licence

By and large I like this program, the first of three tied in directly to the National Numeracy Strategy. It provides 82 activities suitable for years 3–6 and covering most of the objectives in the Number Strand of the National Numeracy Strategy

The main menu is clear; there is no ambiguity about the content of the different topics.

Teachers are able to create lists of pupils, and by selecting the name of a pupil when running the program a record of that child's progress is kept. These records can be printed out to provide evidence of pupils' achievements.

The activities menu is, if anything, even clearer than the main menu (Fig. 1). A matrix sets out the topics and activities by year. Key objectives are highlighted; boxes beneath the objectives indicate how many levels there are. As each level is completed the appropriate box is coloured in, giving an instant visual record. If you allow the cursor to hover over the objectives, you are provided with information about progression through the levels. Another neat touch is the little grey tab to the bottom right of the objectives; pointing the mouse at this gives a thumbnail view of the activity screen.

The activities (see menu, Fig. 2) themselves are for the most part varied and interesting.

The screens are crisp and clear with no surplus details to distract the pupils. Animation is kept to the minimum which again I appreciate, reflecting as it does the philosophy of maintaining pace within a lesson. Sound is used sparingly – no unnecessary bells and whistles.

Children can control their own progress, having the option to repeat a level if desired, and teachers may choose to allow pupils to make the decision about progressing to the next level or not.

The Control Panel on the left serves two functions. It contains the button allowing children to repeat an activity, the *Help* button, and the *Ready* button. It also provides a simple reward

BBC Maths Workshop - NUMBER Select a pupil

Properties of numbers and number sequences

Number sequences	Odd and even numbers
Multiples	Tests of divisibility
Square numbers	Prime numbers

Place value, ordering and rounding

Reading and writing numbers	Place value
Adding and subtracting mentally	Multiply or divide by 10, 100, 1000
Ordering whole numbers	Ordering signed numbers
Rounding whole numbers	

Option to offer next activity is ON more... ▾

Fig. 1. The main menu.

BBC Maths Workshop - NUMBER Default Pupil

Year 3	Year 4	Year 5	Year 6
Prime numbers			
			Recognise prime numbers to at least 20
			<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
Whole numbers in figures and words			
Read and write whole numbers to at least 1000 in figures and words	Read and write whole numbers to at least 10 000 in figures and words	Read and write whole numbers in figures and words	
<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
Place value (Th H T U)			
Know what each digit represents and partition a 3-digit number (H T U)	Know what each digit represents and partition a 4-digit number (Th H T U)		
<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>		
			Main menu ▾ ▴

Fig. 2. The activities menu.

system for pupils by giving a visual display of the progress they have made. My one criticism is that pressing the *Help* button does nothing more than allow pupils to hear the instructions again rather than clarifying the task, a missed teaching opportunity perhaps.

Success is rewarded with a variety of encouraging remarks; similarly mistakes are treated in different ways. In some activities children lose points while in others clues are provided.

My own favourite activities are the ones involving partitioning (Fig. 3). There is only one example at each level, which is perhaps a pity. I've used this program with two Year 5 children of different abilities; observing the way they tackled this activity, in particular, was enlightening!

Another activity I thought particularly good involved ordering fractions (Fig. 4). Pupils drag and drop fractions to put them in order. When they are happy with the order they click the *Ready* button and columns grow above the fractions giving a clear and accurate visual representation of the relative sizes of the fractions.

I was disappointed with the activities that



Fig. 3. Partitioning, Year 3.

require pupils to give a number lying between two other numbers. In both the integer and the decimal examples pupils just had to order a set of numbers. In fact the integer activity for giving a number lying between two others was identical to the ordering activity. It may be that technology could not cope with children typing in one of a range of numbers. If this is so then I would suggest that perhaps a computer is not suitable for practising this concept.

On balance, the minor quibbles I have are more than outweighed by the clarity and ease of use; I'm sure this program is one that will prove of real benefit to teachers in supporting pupils' learning.

I look forward with interest to seeing the next two programs in this series.

Reader Offer

Logotron is offering a 20% discount to MAPE members. Mention this offer when you order your copy of *BBC Maths Workshop – Number*.

Rhona Dick

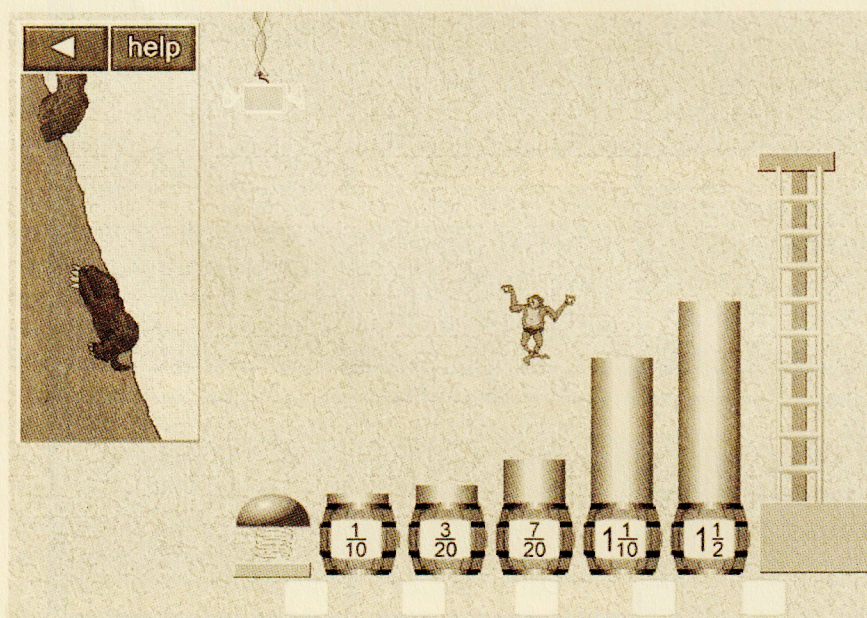


Fig. 4. Ordering fractions, Year 5.

A Multimedia Introduction to Sutton Park

Quercus Publications, 5 Hillcrest Road, Wylde Green, Sutton Coldfield B72 1EG

Price: £20 CD-Rom only; £25 with educational resource pack for schools

The aim of this pack is to provide teachers with information that will enable them to get more out of visits to the park. However if you don't live within travelling distance of Sutton Park, but have a similar locality near to you, then this multimedia resource is valuable to you too. The pack includes a comprehensive selection of activities covering science, literacy and ICT, as well as a very informative and clearly set out CD-Rom, touching on other aspects of the park.

The CD-Rom

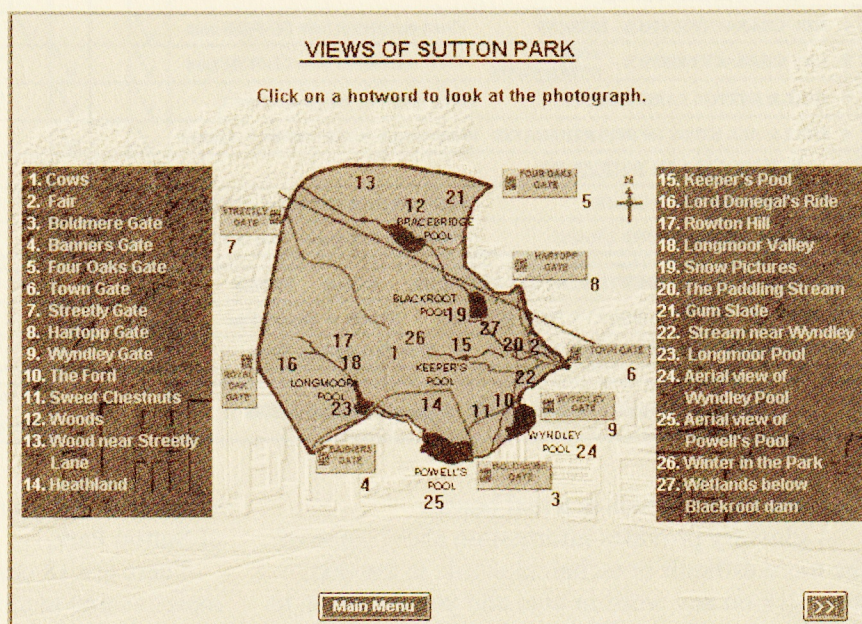
Installing this CD-Rom on either Windows 3.1, 95, or 98 is easy; instructions are printed on the CD-Rom itself, and elsewhere. It is best viewed with the video display set to 640 × 480.

The opening three screens give general information about Sutton Park and its location and there is the option to have this text read out. This text is accompanied by maps that become more detailed as we zoom in on the park itself. In fact there are lots of useful maps throughout.

The contents are divided into clear sections,

Introductions, Animals and Plants, History, Views, Visitor Centre and a very useful clickable Index. I particularly liked part of the Introduction that gave information about using the mouse, and watching for the cursor to change to a hand.

I went straight to the History section. This had a time line, spanning periods from 150,000 BC to the present day, more or less. Annotations at the side indicate some of the major events of the periods. Clicking on a particular time span provides greater detail. There are lots of interesting pieces of information here, for example anyone who kept a

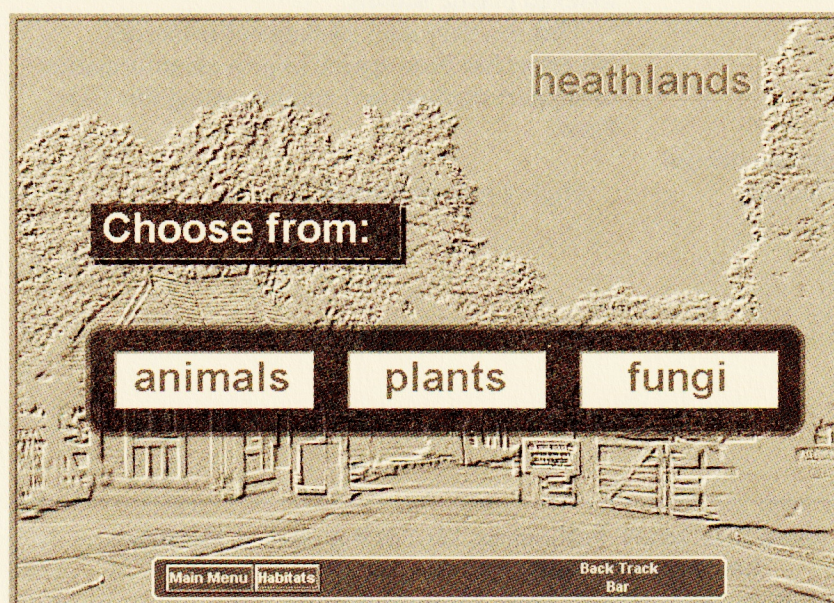


dog here during the reign of King Athelstan (10th Century) had to maim it in one leg so that it could not chase the king's beasts!

However the main thrust of this CD-Rom is

Science, so looking at the Animals and Plants section brings you to a sub-menu of the different habitats to be found within the park. A map (colour coded to tie in with the habitats) illustrates the locations of the different habitats within the park. Having selected one of the habitats you are asked to choose from animals, plants or fungi.

This is a very carefully structured part of the CD, with different classifications branching from each menu. At the bottom of the screen there is a back track bar enabling you to trace your steps back one stage at a time. In fact you are never more than two clicks away from



NOTES FOR TEACHERS 2:

SUMMARY OF *Quercus* ACTIVITY SHEETS

TITLE OF ACTIVITY SHEET	TYPE OF ACTIVITY	ACCESS TO CD-ROM		ACCESS TO INFO BOOKS		SUITABLE FOR YEAR AND / OR ABILITY GROUPS:	MIN. N.C. Read -ing Level	MAIN SCIENCE CONCEPTS INVOLVED	Approx time for completion by group	ANSWER SHEET PROVIDED	
		essential	optional	essential	optional						
MAMMALS											
1 KEY CHARACTERISTICS CHART	qu 1-3: Sutton Park Mammals Chart completion from data on CD-ROM	✓			✓	able Y2 - Y7	2a	classification adaptation to habitat	20-40 min	✓	
	qu 5: British Mammals Chart completion from wider research		✓	✓		Y3 - Y7	3	classification adaptation to habitat	30-40 min	✓	
2 QUIZ 1: SUTTON PARK MAMMALS	Interpreting own entries on Chart 1		✓		✓	able Y2 - Y7	2a	classification adaptation to habitat	20-30 min	✓	
3 QUIZ 2 A: BRITISH MAMMALS	Interpreting own chart entries + research		✓	✓		Y3 - Y7	3	classification adaptation to habitat	20-30 min	✓	
4 QUIZ 2 B: BRITISH MAMMALS	Interpreting own chart entries + research		✓	✓		Y3 - Y7	3+	mammal 'families'	20-40 min	✓	
5 BRITISH MAMMALS FOOD CHART	Interpreting and re-presenting chart data		✓		✓	Y3 - Y7	3	feeding types	10-30 min	✓	
6 MAMMAL FOOD CHAIN PUZZLES	Constructing food chains from chart data		✓	✓		Y3 - Y7	3+	three stage food chains	10-30 min	✓	
INVERTEBRATES											
1 KEY CHARACTERISTICS - INSECTS	Chart completion from CD-ROM data	✓			✓	Y2 - Y7	2	classification habitat life cycles	20-40 min	✓	
2 KEY CHARACTERISTICS - OTHER INVERTEBRATES	Chart completion from CD-ROM data	✓		✓		able Y2 - Y7	2a	classification habitat life cycles	10-30 min	✓	
3 QUIZ 3: SUTTON PARK INSECTS	Interpreting own entries on Chart 1	✓		✓		able Y2 - Y7	2a	classification habitat life cycles	10-30 min	✓	
4 QUIZ 4: ALL KINDS OF INVERTEBRATES	Interpreting own chart entries + research	✓		✓		Y3 - Y7	3+	classification habitat life cycles	20-40 min	✓	
FOOD CHAIN PUZZLES											
1 SUTTON PARK FOOD CHAINS	Constructing food chains using CD-ROM	✓			✓	Y3 - Y7	2a	four stage food chains	10-30 min	✓	
2 BRITISH ANIMALS FOOD CHAINS	Constructing food chains from research		✓	✓		Y3 - Y7	3+	four stage food chains	20-40 min		
OBSERVATION AND IDENTIFICATION RECORDS: BIRDS FUNGI											
"MINIBEAST HUNT" OBSERVATION RECORD	Sketch + Description	✓		✓		Y2 - Y4	2a	observation description	20-40 min	✓	
TREE SURVEY OBSERVATION RECORD + Tree Terminology Sheet		✓		✓		Y3 - Y7	3	observation description	practical work	✓	

A Multimedia Introduction to *Sutton Park* © Quercus Publications 1998NOTES FOR TEACHERS 2
SUMMARY OF *Quercus* ACTIVITY SHEETS

the main menu, which is a real bonus.

A glossary provides information about some of the more difficult or technical words in the text; just click on any word in blue and you are taken to the glossary. Much of the text is spoken, and children can listen to the songs of the birds found in the park as well.

The many illustrations, some drawings, some photographs are first class. However I did find that some of the pictures of flowering plants were too small to pick out many details.

Supporting material

Teachers' notes provide all the information needed to make use of this CD-Rom in your locality

whether or not you live within travelling distance of Sutton Park.

There are 18 children's activities covering such topics as tree identification, a minibeast hunt (and what a brilliant idea to include a ruler at the bottom of the page!), food chains and quizzes. There are completed characteristics record charts to help teachers too!

There are so many resources here that teachers may find it helpful to keep the activity sheets in indexed plastic wallets.

This is a very slick package of resources. No effort has been spared to provide information to support teachers and children using this CD-Rom.

Highly recommended!

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