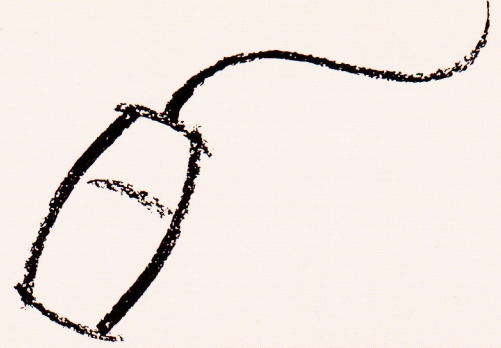
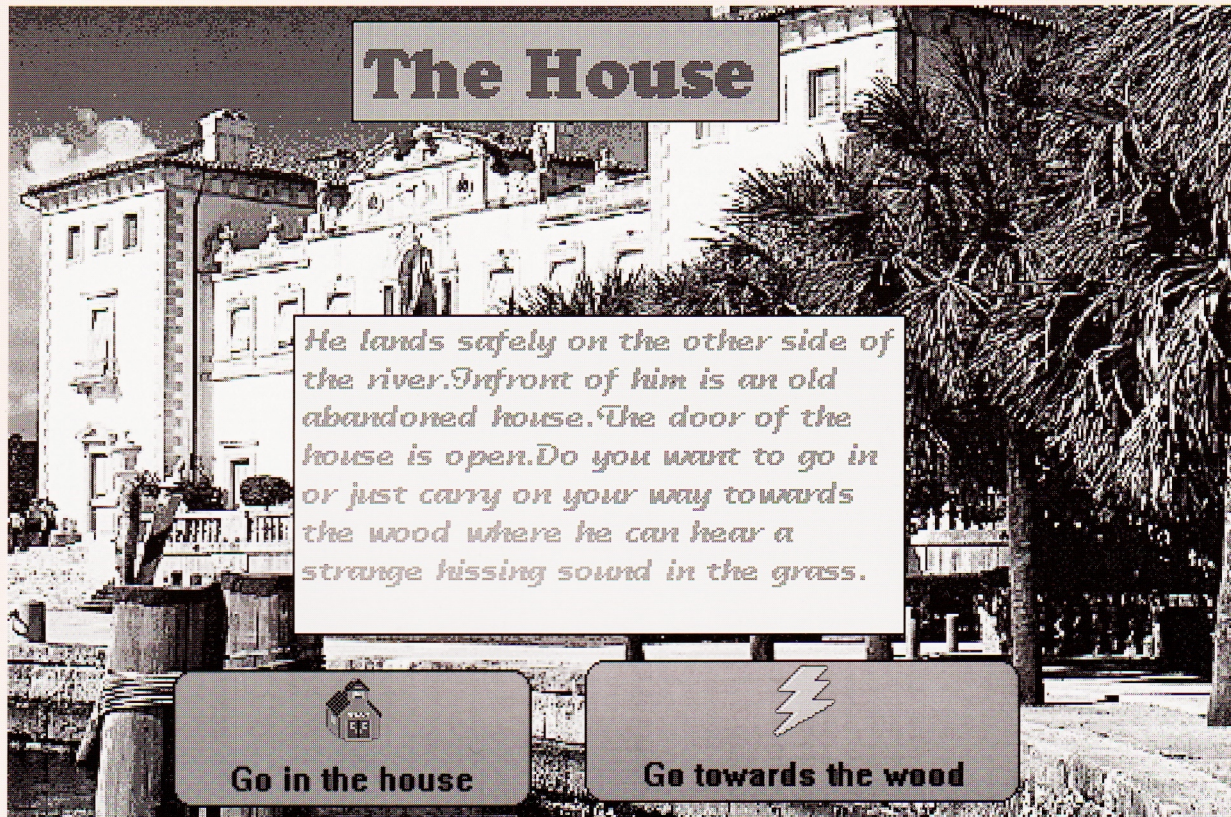


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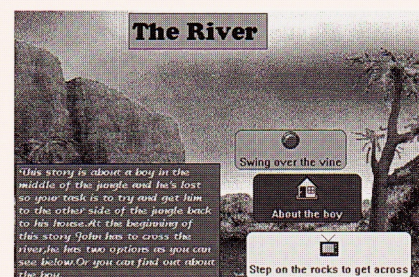
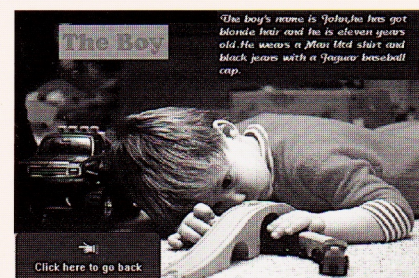


► Issue No. 2

► Spring 1999



- Lottery Funding
- Visit of the Laptops
- Hardware: Hard Choices
- Net So Easy!
- Teaching Keyboarding



NEWMAN COLLEGE with MAPE

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MAPE

MAPE matters

Heather Govier
Chair of MAPE 1998
hgovier@argonet.co.uk

During the 18 years that it has been in existence, MAPE has had five Chairs. Throughout that time the organisation has grown in scope and in strength, and ICT in education has changed beyond all recognition. My thanks to all my predecessors, especially to Les, who is retiring after a dynamic four-year term, and to Roger, MAPE's longest serving Chair, who remains a stalwart of the Executive and who, I hope, will hold my hand as I feel my way into the role.

Past Chairs of MAPE

Ron Jones	1981–1984
Brian Weaver	1984–1985
Roger Keeling	1985–1991
Senga Whiteman	1991–1994
Les Watson	1994–1998

Newer members of MAPE may be interested to know a little about how the organisation works and who it comprises.

MAPE is a registered charity with a written constitution, run on behalf of its members by a Council of representatives. Any changes to the constitution must be agreed by a General Meeting, to which all MAPE members are invited. This has been held annually in the past (usually at Conference) but this year it was agreed that the constitution should be amended, changing the AGM to a Biennial General Meeting. The reason for this is to allow greater flexibility in the timing and organisation of conferences.

The MAPE Council, which determines overall policy, meets once a year. It is composed of the Executive (see below) plus two elected representatives from each working group and three regional representatives. There are currently three working groups: Publications; Products and Innovations; and Communications. These are the real workhorses of MAPE. They meet termly to plan future products and publications and put in much effort between

meetings, developing materials and commissioning or writing articles, activity sheets and so on. The working groups are constantly on the lookout for new members with an active contribution to make. If you would like to join any of them, we would LOVE to have you. Just contact the group co-ordinator and ask if you can come along to the next meeting.

Working Group Coordinators

Publications

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The MAPE Executive (elected by the Council to serve for two years) also meets termly, to co-ordinate this work and other activities such as conference planning which fall outside the remit of any of the groups. The Exec comprises: Chair (myself); Vice Chair (Betty Lumley); Treasurer (Keith Whiting); Secretary (Val Siviter); Business Manager (Roger Keeling); Publications Coordinator (Rhona Dick); and a regional representative – currently either Sandra O'Neill or Theresa Mungall from MAPE Scotland. We also have the power to co-opt three other persons to the Exec and this year Barry Wake, Rob Crompton and Ruth Allanach are working with us.

At Conference last year (and subsequently through the MAPE Scotland website) we conducted a brief survey of members' views of MAPE and the services we provide. The results were not especially helpful in identifying areas for focus or development

because everything we do seemed to be valued by somebody. There were those of you who wanted mainly classroom ideas and had little interest in policies or management issues. But there were others who took the opposite view. This is probably an indication of the breadth of the MAPE membership: from class teachers to IT coordinators or Heads; from trainee teachers to teacher trainers; from those new to MAPE to those who have been members for as long as they can remember. However, teaching ideas, free or discounted software, activity sheets and reviews were tops for popularity. We hope that our new publications format, centred on termly Focus Packs, will please, by supplying more of what you want the most.

The questionnaire answers have also given us many ideas for future packs and for website content. Many thanks to all who took the trouble to complete and return the form. As a result of your feedback and our own general review, MAPE membership now provides the following:

- a termly newsletter to keep you fully up to date with all developments in ICT, including reports of government initiatives, reviews of software and feedback on shows and conferences.
- termly Focus Packs, each covering a different area of the curriculum and containing activity sheets, teaching ideas, software and associated support materials and resources (forthcoming

topics include Communication, Numeracy, Home-School Links)

- this annual MAPE magazine with articles discussing issues of current concern or presenting case studies of classroom practice
- a dynamic Web site containing an on-line newsletter and pages of activities and teaching ideas (CHECK THIS OUT AT <http://www.mape.org.uk>)
- an email discussion group and a help line for your ICT problems (coming shortly – watch the website for news)
- access to a variety of national and regional training events, courses and conferences (again see the website for the most up-to-date information on these)
- discounts, negotiated for members, on many software packages and support materials.

MAPE is for you, so if there is anything you would like from us, or anything that you are unhappy about in what we are doing, do not hesitate to let us know. Write to Rhona if you have something for publication, email me directly if I can help, and look out for our forthcoming chat group on the web.

I hope you feel that MAPE is still excellent value for the new membership fee of £20 and that you will remain with us for many years to come. I shall enjoy serving MAPE as Chair for the next couple of years and would be delighted to hear from YOU.

Treasurer's report

Keith Whiting
Treasurer

In the early years of the 1980s the subscription cost members £8.50. The subsequent history of subscriptions looks like this:

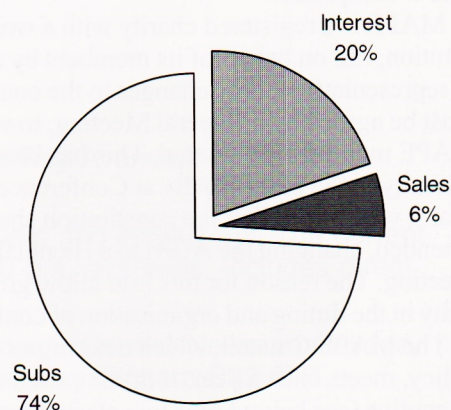
1984	£10
1987	£12
1991	£15
1999	£20

As you can see, the subscription to MAPE has been held at £15 for eight years. Unfortunately the time has now come for an increase. Inflation continues to nibble away at our funds, interest rates are substantially lower, and our income from sales is at an all time low. Even our Halifax shares have suffered in the global recession. After making a small financial loss in 1997 we have been drawing upon our reserves this year, and it has proved necessary to increase the subscription to £20 per annum. Student membership will be increased to £12 per annum. Group membership (ten or more applica-

tions posted together) will rise to £10. It was decided to maintain overseas membership at the current rate.

Our sources of income are detailed in the pie graph below.

Income 1997



Over two-thirds of our income from subscriptions is spent on publications.

The National Council of MAPE will continue to make every effort to give members the best possible value for money.

Training for teachers – is it just a lottery?

Mike Rumble

Independent Education & ICT Consultant and Chair of NAACE

You may have heard some rumours about £230 million of training for teachers and school librarians in the use of ICT. Yes, they are true!

Some questions may spring to mind.

What does it mean?

How will it happen?

When will it happen?

Why haven't I heard much about it?

What does it mean?

The government has launched a number of initiatives associated with the development of the use of ICT in schools and more widely in continuing education. Most of these initiatives have included targets – (what doesn't nowadays?) – and most have had some funding attached to them.

The most obvious are those targets and funds associated with connecting schools and developing a National Grid for Learning. The one which you will have heard least about is the target to ensure that all teachers have the confidence and competence to employ ICT in teaching their subject.

Last Summer the government released circular 4/98. You probably haven't read it. It refers, after all to initial teacher training and sets out the standards expected to achieve Qualified Teacher Status (QTS). One part of the circular (annex B) refers to 'the use of information and communications technology in subject teaching'. It's not about teaching IT capability. It's not about pupils' ICT skills. It's actually about teachers' knowledge, skills and understanding regarding the use of technology to assist their teaching.

From now onwards all newly qualified teachers will be expected to demonstrate that they have the competence to know when and when not to use ICT in their teaching and, if they decide to use it, how.

What has this got to do with me and where does the lottery come in?

The government has set up the New Opportunities Fund (NOF). You may have heard of it. It has very large sums of lottery money to allocate to specific projects, many of which have to do with education. One such project is to address the fact that ICT has the potential to enable teachers to be more effective and more efficient in their teaching but that most

teachers have had very little training in its use. The grand sum of £230 million has been set aside from this fund to provide training for all teachers and school librarians over the next 3 years. I'm going to focus on teachers here. The objective is to enable them to at least have the same knowledge, skill and understanding that is now expected of newly qualified teachers.

How will it work and how will I get my training?

I'm afraid these questions are still to be fully answered. The New Opportunities Fund was only set up a few months ago and is still wading its way through the tasks it has been set. The Teacher Training Agency (TTA) has been working to create a model which will assist every teacher to identify their specific training needs and to ensure that, when teachers receive training, the quality is of a sufficiently high standard. After all, we will only get one go at this. The rules which govern lottery money are tight and the funding will not be repeated.

When will this happen?

In the new year schools will be notified by NOF how much training money they have been allocated. They will not actually get the money; this is lottery money, governed by lottery law, and the convoluted method of paying for training is designed to minimise school administration and to comply with the law. You can expect a lump sum for each school and an allocation based on the full-time equivalent of teachers in the school. On average this will work out at about £450 per teacher.

Once a school is ready for training, and you'll get some guidance to help you decide if you are ready, you can book your training with any one of a list of 'Approved Training Providers' who will have been through rigorous quality checks by TTA and will be closely monitored to ensure high quality throughout the 3 years of the programme.

Every teacher will have the opportunity to explore needs identification materials which will help them to reach an informed decision about their particular training needs. This means that the training can be matched to each teacher rather than everyone receiving exactly the same package regardless of previous experience or expertise.

And the training itself; what will it look like?

That's a really difficult question to answer as the potential training providers are currently working hard to plan their models of delivery, but there are some key points it is worth making:

- It will focus on classroom practice not technical skills;
- It will not involve large amounts of time out of school;
- It will employ ICT, probably including on-line tutorials and support with Internet and email access;
- It will take place over more than just a few days or weeks so that you can put into practice what you learn and share the outcomes with others;
- It will have a close focus on teaching literacy and numeracy.

will have to prove that they have suitably qualified and experienced providers.

This is not about teaching teachers to operate computers; it is about how you employ the wide range of technology available for teaching and how you address all those issues you know about like:

- How do I organise my classroom and my teaching to make best use of the technology available?
- What are the pupils not learning when they use technology?
- How can I monitor their learning when the technology does so much for them?
- How can I use technology to make my work more efficient and for my own continuing professional development?

Who will provide the training?

Another difficult question to answer at this time as those who would like to become Approved Training Providers are currently drawing up proposals to submit to TTA and NOF for approval. Most local education authority advisory services are likely to be involved as will many higher education institutions. Many of the big names in the ICT in education industry are also bidding to get involved but they

What next?

There are many questions and, at the moment, not too many answers. It's early days yet and many people are working very hard to make sure that the training available is right for each teacher and every school. The training is due to start for those schools and teachers who are ready in April 1999. There will be an opportunity for everyone. Watch out for the information that will arrive in your school early in 1999. This is a one-off opportunity. Take it.

Steps for schools – what you need to do to take part in the scheme**Heather Govier**

Step One – when the invitation comes, later this term, submit a bid to the New Opportunities Fund (NOF) to show how and why your school is ready to take advantage of the training offered. This bid should provide an audit of current provision and expertise, and an action plan for future development. It does not need to include a detailed analysis of every teacher's training needs although this will be necessary at the next stage of the process. The NOF will scrutinise your bid and if it decides that you are able to make good use of the funding, your school's allocation will be pigeonholed until you are ready to make decisions about which provider(s) to use and how to phase the development of all your teachers.

Step Two – conduct a detailed analysis of the training needs of all teachers in the school. Needs identification materials have been developed by the Teacher Training Agency and schools will be receiving these shortly. They are based on the expected outcomes and provide for an audit of both your knowledge, understanding and competence with ICT and your ability to use it effectively for teaching and assessment. The needs analysis will form the foundation of your school's training plan.

Step Three – implement the training plan. This will involve selecting a suitable provider (or providers – schools may wish to choose more than one provider in order to meet the different needs of different members of staff) and deciding on the sequence and timing of training for each teacher. Schools will never actually see the money. Money from your pigeonhole will go direct to the training provider and you will be kept informed about how much is left in the pot.

Step Four – on completion of the training each teacher will be expected to draw up an action plan for his/her own future education in the use of ICT in teaching. The NOF training, although a one-off, is thus seen only as the foundation step in a process of continuous professional development.

Hardware: hard choices

The decision process of a junior school

Dr Tony Lyons

Presently employed on a part-time basis to set up and establish the ICT suite at Great Moor Junior School, Stockport

The NGFL has had an impact in schools, and on the way that the IT retailers view schools: the primary education market is a real market for those trading in computer hardware. But, in terms of computers, the school is different from a business; there is a broader range of software used in a primary school than in many offices, there are many users and the operating priorities are quite different. After all, in a school, it is likely that the machines will be used by a range of children each day, for a range of purposes, with varying degrees of aptitude and care: in a business there will be few users, limited (yet powerful) software and no danger of malicious or accidental damage. Computer retail businesses are taking the schools seriously, but for many of them there is a learning curve, as much as there is for schools in deciding how to operate an expanding IT curriculum.

Schools have several decisions to make, each of which has a major implication as to how the ICT curriculum will be delivered. Is the school going to have computers in each class, or are they going to be centralised? Are the computers going to be networked, or are they going to be used as stand-alone machines? Doubtless, the size of the school – both in terms of space accessibility and budget available – will have an overriding effect on the choices made. But this is just the beginning of the decision process.

In some LEAs, advice to schools is passed down: schools are being recommended to use particular systems or suppliers, or, as in Manchester, a small team has been provided to equip many schools with appropriate hardware and software. This takes the strain away from the teachers and headteachers, and allows 'experts' to deal with difficult technical choices.

Other LEAs operate a 'bottom-up' policy, in which the schools make the choices most appropriate to their school, and the LEA offers advice and support, but not recommendations: Stockport is an example of this. This Stockport model does have much to commend it: if a school is well equipped with the latest Acorns, having dedicated a sizeable proportion of a recent budget to IT in recent years, then why should they be forced to use PCs or AppleMacs? Similarly, if the staff of a school are

largely confident with AppleMacs then why should they be forced to expand using PCs or Acorns? However, the Stockport policy does throw up one problem: teachers, adept in so many areas of the curriculum, and perhaps confident and experienced in using software, are suddenly faced with having to become familiar with the language of 'technos', and to take a keen interest in the specification of the machines they are using and which they may be intending to buy.

One school in which this was the case is Great Moor Junior School. It is a large junior school with over 300 children on roll. The school made two immediate choices: first, there would be a central ICT suite to which all classes would be timetabled. They also decided that they would be networked, thus enabling each computer to access the internet, for instance, and to allow class sessions on specific skills to be easily facilitated. Internal reorganisation enabled a room to be set aside to become the new ICT suite. With a sizeable budget made up from the NGfL grant, the school budget, the PTFA and the school funds, it was anticipated that a suite of seventeen computers could be developed: this would enable whole-class lessons, with up to two pupils sharing a machine. That was when research into what was available began . . . as did a learning curve for the staff.

A visit was organised to The Stockport School, the local secondary school, and the layout was examined; similar visits were made to other local schools which had 'labs'. Bramhall High School, another local secondary school, invited Great Moor Junior School representatives to presentations given by their potential suppliers, notably NS Options, RM and ICL.

After this introduction it was clear that network computing was going to be very different from the 'stand-alone' computers with which most junior staff were familiar. It was also evident that to make an informed judgement before spending the school's allocated funds, some knowledge had to be gained to interpret the jargon. However, the first decision was to decide on the format of the computers.

The Acorn machines in the school had remained sturdy and reliable. Despite years of hammering, they still worked and the technical support needed

was minimal. The Acorns used in some classes were old, (A3000s) and this didn't do much good for their reputation with some of the staff; in PC terms it was probably like using a 286. Similarly, some of the staff had PCs and spoke highly of their capabilities. Nevertheless, there were many stories of systems crashing out and the value of good technical support.

Some talked of the PCs as being 'industry standard': that was not a helpful statement . . . and curiously one used by some potential suppliers. In the graphics and media industries AppleMacs seem to be the norm. Where PCs are used in the business world there is a very broad range of popular software packages: if children are used to *Word 97*, they have a slight learning curve to use *AmiPro*, *WordPerfect* or a host of different word-processing packages, much the same learning curve that they would have to move from *Impressions* or *Ovation* to a different package. When it comes to business wordprocessors, as with other packages, there is no 'industry standard'. Anyway, some businesses do use Acorns, and very successfully too. And by the time children from a junior school are going to be doing even work experience, there will have been such a change in the software and hardware available, the means used to develop the skills now won't be that significant, so long as they can enable the children to develop those skills.

To assist the decision, a SWOT analysis of the two formats was made (i.e. Strengths, Weaknesses, Opportunities and Threats).

SWOT analysis of ACORNS

Strengths

- they are child friendly, with clear icons and are easy to use.
- they are already in the school (a short term benefit, but which would enable ICT work to be followed up in class if appropriate).
- they are sturdy and technically sound.
- the NC is difficult to damage or corrupt.
- the NC is not attractive to thieves as they cannot be off-loaded as stand-alones.

Weaknesses

- not in general use at home.
- not in broad use in the secondary schools we feed.
- the use of old machines has tarnished the image.

Opportunities

- the pupils could learn a slightly different system than they might be familiar with at home. It would not be unlike the AppleMac, and would help the adaptability of the children.

- the system would be familiar to the graphics/media main system.

Threats

- long term outlook for Acorn not clear

SWOT analysis of PCs

Strengths:

- it has become the main style of domestic computer, and this could help with a number of the school's pupils.
- half of the present school staff are familiar with PCs.
- the long-term prospects are good.
- it is the system in use at the secondary schools we feed.

Weaknesses:

- they are not as child friendly as Acorns.
- the school would need to invest in new software. The 'front end' would need to be well secured, as it is easy to re-configure/corrupt the system either by accident or maliciously.

Opportunities

- it ensures that the children have access to the popular system.
- there would be an opportunity for a link between the school and homework for some children.

Threats:

- the PC tradition was for rapid upgrades and 'outdating', and the poor track-record of backward compatibility.
- the track-record of 'technical assistance' needed: indeed, it is recommended that in purchasing a PC you should not consider that technical support might be needed, but rather that it WILL be needed.

Great Moor Junior School has several A7000 machines, but several members of staff had PCs at home. It was decided to obtain quotes from two suppliers of each format: RM and Firstec were sought to give quotes for the PCs, and Desktop Projects and 3SL were asked to give quotes for the Acorns.

Very soon, the staff interested in ICT began calling the computer 'the workstation'. They realised about the importance of 'speed', cache size and memory size in PCs. What was more, they learned that it was a fast changing world in which the school was going to operate: network computers were often standalone computers linked together but there was information about the development of network-dedicated machines which were increasingly popular, particularly in the USA, and which could

not be used as standalones. Would this become the norm in the UK networked systems in the near future?

The Acorn solution was on this 'forward thinking' line. Their suppliers pressed the Acorn NC – a little black box which took the place of the linked-in standalone workstation. It was a network-dedicated workstation and as such it had several advantages, not least the lack of attraction to potential thieves. It was not possible to use the NC except as a part of a network: 17 workstations for which there would be no real 'thieves' market was of great appeal. In contrast, the PC quotes gave clear specification about the server and the workstations . . . and these could readily be used as standalone machines . . . and be acceptable to rogues as merchandise.

Consideration was given as to how the new facilities could best be set up. It was thought that for teaching purposes having a raised, large monitor would be necessary . . . possibly with the help of a remote-controlled mouse. However, after discussion with others, it was decided that, budget permitting, we should buy a projector so that a workstation could link in and project onto a screen. This would then become a school facility rather than an ICT suite peripheral. Not only would it lend itself to broad application throughout the school, it would enable good size images to be achieved with good quality. A whiteboard as a screen was considered, but then it was decided that there could be too much glare and a screen would be a better option. Moreover, should the budget allow, a laptop should be considered for staff use: this would enable preparation at home and the portability **would** give new opportunities, not least when linked into a projector. Assemblies, staff-meetings, presentations and non-ICT lessons could be all revolutionised.

The potential supplier visits to the school were informative. The RM presentation, as it had been at Bramhall High, was impressive. They were able to give a convincing picture about what they had to offer, and just as important, gave a benchmark as to what should be looked for as regards the 'front end' from other suppliers. Firstec, an established business provider based in the North West, gave good tips on the layout of the room and gave a benchmark as regards hardware specification. Desktop Projects offered superb advice and plans for the room layout and opened new questions, with considered ideas, for instance about the potential need for the positioning of the server, the hub and a projector. They also suggested that having four standalone A7000+s in the network would, by use of the ethernet card, enable CD-ROM drives to be accessible by all machines. 3SL offered good advice on all aspects, not least the use of laptops: they also offered to give a presentation which would compare a PC, the Acorn and the NC.

Having seen the Acorn NC in operation (courtesy of Mike Evans at 3SL) it was impressive: the server setup enabled the machines to run PC software as well as Acorn software. One pupil could use Acorn's *Draw* package and then move onto MS *Word*: another could switch from using *Encarta* to using *Impressions* . . . on the same machine, at the same time and without difficulty. They worked/changed rapidly: there would be no difference in speed in running Microsoft software on the NC or on a PC. It was a dream system. What was more, old machines could be plugged into the mini-network and they could work with software they should, on paper, be unable to use, and couldn't use when they were operating as standalones. The only drawback was that the 'sound' facility hadn't been sorted. The NC was almost the panacea to the school's needs.

At the initial meeting with the LEA ICT team it seemed likely that the school would be heading towards the Acorn solution. The factor which was given a good deal of attention was the server. 3SL offered an Eclipse server running Windows NT, whereas Desktop Projects offered a Linux PC server alongside a WinServer. Research into the merits of each was ongoing when Acorn Computers broke news of their change: they were going to be a company dedicated to digital television and 'thin-line' users. New development in RISC workstations was going to be halted, although present machines would continue to be supported. This brought up the question of the relevance of Acorn: it was considered that if they were not going to be developing workstations in the future, software interest and third party developments would diminish. In 4 years' time, the school might be using PC software out of necessity to meet the demands of a changing technology. The ICT steering group of the school deemed that it would be prudent to move over to the PC, not least because the NC, which was still going to be developed and marketed, was still not the finished product. . . . In the future, when it is developed, it may become THE network machine for schools, running chiefly PC software. The school's need was immediate, and investment had to be made into systems which would be able to meet those needs instantly.

Stronger consideration was then given to the PC quotes: they were certainly different: RM pushed the front end but Firstec seemed to offer better hardware. It was after hearing that Beebug, a noted and established Acorn supplier, were equipping numerous Manchester schools with PCs that the school decided to obtain a 'last minute' quote from them. Although belated, it was of real interest, and Beebug certainly knew the education market.

The three PC quotes were different.

RM offered a good 'off-the-shelf package'. The

hardware was fine, but the front end was impressive, if a little too tailor made. The back-up service was, by reputation and by promise, good. Alas, the price was very high in comparison with the other quotes: to opt for their product would mean economies in peripherals and in the number of workstations.

Beebug offered better 'on-paper' hardware specification than RM and a very decent 'front-end'. The amount of software on board the package was not as extensive as RMs, but what was on board was useful for the Junior school. Moreover, what was offered enabled the school to consider buying the icing on the cake of a laptop and a projector and screen. Despite the NT server back-up provision, they suggested providing an ArcServe back-up to the system, as well as a suitable UPS (uninterrupted power supply), useful both for power failure/surges but also for shutting the system down. They also offered headphones as opposed to speakers.

Firstec offered the best on-paper hardware, and with really worthwhile software, including *Microsoft Publisher*, a godsend for anyone wishing to develop a website, as well as a number of CD-Roms. Indeed the well specified workstations all had a CD-Rom. The front-end security, with different accessibility for teachers, pupils and classes, was well structured. Firstec offered a comprehensive package that could meet the needs of the school, and enable the school to buy the peripherals to enable the school to develop ICT skills efficiently. Local schools, notably Bramhall High and Wilmslow High gave testimonials as to the impressive service offered by Firstec. It was a strong contender.

Conclusion

It was chiefly the price that determined that the RM quote was not ideal for our needs. To have accepted their product would have over-stretched the budget and compromised our plans for the teaching of ICT.

That left two bids. Firstec, the respected supplier to the business world, are establishing themselves as a worthwhile player in the education market. Beebug have historically had dealings with schools, as well as being respected both as an Acorn and a PC supplier.

The decision was a narrow one: knowing that good back-up was going to be available on both counts it was based in our comfort with the ease of use and security of the system. Despite Firstec's excellent package, Beebug's experience in the education market paid off: for Great Moor Junior School the extra built-in back-up provision and the handling suited the school's needs instantly. Other schools will be equally happy with Firstec's provision, and they will be a lead contender when the renewal of hardware is a consideration over the next 4 years.

Having to become familiar with 'tick speeds', large memory sizes, caches, buses, monitor refresh rate and the benefits of a dual motherboard was new to the teachers familiar with the Acorn system. One side effect is the ability to interpret PC adverts more clearly: the other is to berate the potential demise of Acorns. It could be that before Great Moor is renewing their hardware in a few years time the Acorn NC will be the all-singing, all-dancing Godsend it promises to be. It's just that for this time round it was still at the rehearsal stage.

Supplier details

3SL can be contacted at 501-511 Crewe Road, Wheelock, Sandbach, Cheshire CW11 3RX; tel: 01270 768200.

Beebug Computers can be contacted at 117 Hatfield Road, St Albans, Herts AL1 4JS; tel: 01 727 840303.

Desktop Projects can be contacted at Unit 2A, Ford Street, Stockport SK3 0AB; tel: 0161 474 0778.

Firstec Limited can be contacted at 23-25 Green Lane, Wilmslow, SK9 1LH; tel: 01 625 548424.

Research Machines can be contacted at New Mill House, 183 Milton Park, Abingdon, Oxon OX14 4SE; tel: 01235 826000.

A Thank You from Romania

Carmen Burcea-Iancu
1900 Timisoara
Str. Lidia, Nr. 92, Sc. B, Ap. 9
ROMANIA

Dear Fiona,

I write you this letter to express my gratitude for your support which helped us to become members of MAPE. Helping us to have access to information on IT, you helped generations of kids from Romania as well as many teachers in Timisoara organized in an association we named 'IRIS'.

I'm looking forward to hearing from you.

Love
Carmen

ICT and literacy

Sue Brindley

University of Cambridge

The literacy industry is now firmly in place. We have the documents, we have the advisers (lots and lots), we have the government hype. So it came as a refreshing change to hear one of the literacy regional directors, when talking about the national Literacy Strategy, say to teachers: 'There's nothing really new here. It's just what you've always been doing in the classroom, only organised into one folder.' Refreshing, but also slightly depressing, because it is so true: the Framework is exactly the version of literacy that's been kicking around for some time. We have, in that sense, always been 'doing' literacy: teaching reading, usually by a variety of methods, including phonics, developing writing, and even seeing the place of speaking and listening in all of this. If we hadn't been required to teach a national curriculum which had quart into pint pot written all over it, we probably would have been giving literacy the allocation of time it always had received, instead of the idea of the literacy hour having to be (re)discovered by government advisers. But it is here, and it's familiar. 'All teachers know that pupils become successful readers by learning to use a range of strategies to get at the meaning of a text . . . but have often been over-cautious about the teaching of phonics. . . . Both reading and writing use work at word, sentence and text level. . . . Pupils need to understand from an early stage that much of their writing will be read by other people and therefore needs to be accurate, legible and set out in an appropriate way' (DFEE 1997, pp. 3–5). It's what Margaret Meek referred to as 'schooled literacy . . . primarily associated with learning to read and write.' (1991, p. 124) But is schooled literacy sufficient to equip pupils to cope with the reading and writing demands of a curriculum which extends beyond the printed page? In short, what do we mean by literacy in a post-print society?

ICT stands in interesting relation to literacy. It is capable of supporting and promoting the basic skills of reading and writing, and yet carries with it the inevitability of developing that definition into a model of literacy as a dynamic concept extending beyond the basic acquisition of reading and writing skills. When, for example, was the last time a printed book spoke to you? This is not to say that schooled literacy should not be taught. It is after all what we have been doing all this time. But it does

need to be redefined to accommodate the changing demands made on us as a society. Papert's idea of 'letteracy' may be useful here. In *The Children's Machine* (1993), Papert contends that schooled literacy is better described as letteracy, and can be achieved independently of the acquisition of literacy. Literacy is the broader canvas, and ICT the medium of access and construction. In many ways letteracy and literacy can go hand in hand, of course. Many teachers already use ICT imaginatively to consolidate schooled literacy. I include here some examples of ideas for teaching literacy using ICT devised by Warwickshire teachers at an INSET day I ran at Warwick University. Additionally, existing software allows sound/symbol relationship (phonics) to be reinforced through the interaction of sound and graphics in word games, and supports early recognition of word families (see, for example, Freebody, 1992). There is also research evidence to demonstrate that the use of CD-ROM interactive storybooks in the classroom extends vocabulary (Elley, 1989) and that the motivational factor of using interactive storybooks is significant in extending the time reluctant readers are able to concentrate on texts (Lancy and Hayes, 1988).

Teachers are aware, however, that different and additional reading skills are simultaneously being developed simply by the use of ICT as the reading medium. Reading here involves graphics, photographs, video clips, sound (speaking and music) and the possibility of textual manipulation. These are not the conventional elements of basic literacy acquisition. Similarly, writing develops beyond production of a story, to accommodate email, with rules for use which sit somewhere between oracy and writing, but which belong to neither. Collaborative writing becomes a reality far beyond the classroom walls, not just between pupils in different schools, but in different countries (Adams and Brindley, 1998). Pupils can publish their work, ask for comments and explore the writing processes in ways even Graves hadn't anticipated in his work on conferencing. The Fiction Factory (<http://www.vianet.net.au/~gwood/factory/>) is an excellent example of the opportunities afforded by ICT to extend the writing repertoire in ways SATs (the government tool used to measure acquisition of literacy skills) have yet to acknowledge, or perhaps, imagine.

Texts are no longer linear, single authored, or

fixed in time. With multimedia and hypertext, they are infinitely flexible, multi-authored and multi-dimensional. Put the literacy skills demanded by the new texts against the Framework's definition of literacy, and the inadequacy of the current model isn't difficult to spot.

There's a second area to be thought about, too. If the broader definition of literacy is acknowledged as ICT reinvents the text, there opens up a further area of development. Schooled literacy is taught in order to access texts. That purpose achieved, literacy was seen to be 'acquired'. Most students would expect to leave primary school as literate and for those who did not, secondary schools provided learning support until they did achieve it – or left and became adult illiterates. Literacy has been seen as a basic skill, a one-off hurdle to be cleared and then pretty much forgotten. But the new literacy cannot be contained in the same way. There clearly exists the need to reconsider literacy as an ongoing development – lifelong literacy. The acquisition of the new literacy cannot be ticked off at eleven. Instead, whilst acknowledging the need for basic – schooled – literacy, there should be a further taxonomy of literacy skills: basic, extended and advanced, reflecting the changes made in reading and writing demands through ICT. Extended literacy, for example, would include the understanding of text beyond the linear, and the differing demands made on the reader encountering this type of text. It would need to include information literacy as defined by the National Grid for Learning:

... a definition of network literacy [is] the capacity to use electronic networks to access resources, to create resources, and to communicate with others. These elements of network literacy can be seen as extensions of traditional skills of reading, writing, speaking and listening. (NGfL, 1997, p. 10)

Advanced literacy would demonstrate the sophisticated understanding of the construction of text with a spatial dimension, the interaction of text, sound and graphics, the construction of text which is interactive and the reader demands being made by such texts. Examples of such literacy demands already exist. Birkets cites Coover's work in which he and a group of students established a 'hypertext hotel', a place where writers were free to 'check in, to open new rooms, new corridors, new intrigues, to unlink texts or create new links, to intrude in ... texts of others, to alter plot trajectories, [to] kill off one another's characters. ...' (p. 160)

Literacy has moved on. The UK is some way behind other countries where acknowledgement of this has already been made. Take for example the statement made by Professor Douglas Young at the University of Cape Town, and which has now been

incorporated into the Republic of South Africa's policy statement on language:

... literacy has [to be] expanded to include several kinds of literacies. 'Literacies' stresses the issue of access to the world and to knowledge through development of multiple capacities within all of us to make sense of our worlds through whatever means we have, not only through texts and books.

Literacy has been asked to travel a long way in this article. The 'literacy industry' emerged as a direct response to government concerns about standards of literacy. I return to Margaret Meek in conclusion:

... Some say there is a literacy 'crisis', but this is just our modern way of drawing attention to what we think is important ... (p. 9)

And what could be more important in education than ensuring that all the time, energy and funding currently supporting the National Literacy Strategy actually reflects the real literacy needs of pupils in this rapidly approaching millennium era?

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LITERACY AND IT PLANNING TEMPLATE

Title: *Little Monster at School*

Activity: *How to recognise speech within text*

Resources: *CD Little Monster At School*

What to do: *On each page identify what is actually spoken by each character (who says what)
 Develop into playscript/prose.*

IT capability: *Loading cd. using mouse following instructions*

Literacy requirements: (cross reference with N.C. if appropriate)

*Identifying speech within text.
 Write in different style/form.
 (Yr5/6) Looking behind literal meaning to develop style, text, character etc.*

Possible extension activities:

Developing plot, character etc Write own script

Write own tale/fable

Experience level:

*beginner - Yr2/3 - (speech bubbles) identifying spoken word
 intermediate - Playscript
 experienced - Dev. plot, character into own script/story*

LITERACY AND IT PLANNING TEMPLATE

Title: Newspaper / magazine

Activity: A multimedia n/paper or magazine for whole school to read - Yr 5/6

Resources: Computer with multimedia prod. software e.g. Genesis.

What to do:

Yr 5/6 in small groups of 4 each prod a newspaper. Initial discussion + viewing of n/papers/mags. To establish content. Each child to produce at least 1 page on subj. area. of own choosing. Layout of each pg. to be decided by its content. When pages are created they will need to be checked & refined before production run *

IT capability:

Comm. + Handling Info - 2a (K 5.2)

Literacy requirements: (cross reference with N.C. if appropriate)

- * write for range of readers
- * organise + present writing in different ways
- * understand the value of writing

Possible extension activities:

- * Redrafting
- * Proof-reading
- * Presenting - spell-check etc

Experience level:

beginner

intermediate

experienced

* We would suggest one copy per class plus a copy for each member of compiling group. Each group to be responsible for compiling one edition. They could explain to each class how newspaper was compiled.

sb/sr/pc/ohp5

Teaching keyboarding to individuals and whole classes

Ros Chapman

Independent SEN/IT Consultant ros@rmpic.co.uk

John Kenney

Volunteer, Alban Wood Junior School, Watford, Herts.

Introduction

This is an article of two parts. The first part describes an effective strategy, designed by Ros Chapman, for teaching keyboarding to individual children, using a computer. The second part describes an experiment organised by John Kenney at Alban Wood Junior School, Watford using her method with whole classes, each child learning on an almost full size paper facsimile of a keyboard.

The teaching method

Seating, and positioning of equipment

The children should be encouraged to sit up straight, using both hands for the computer. The equipment should be set up so that the pupils' chairs are higher than that used in a conventional writing position so that their arms can be parallel to the ground when using the computer. The screen should be facing away from windows or any other source of light, and should be tilted downwards to avoid reflection from windows or any electric lighting in the room.

Before the following strategy is explained to the pupils, a baseline assessment should be made by timing each pupil as one alphabet is typed, and the time noted.

Typing strategy

If a pupil knows the alphabet, this strategy can work very well. Most of the letters in the alphabet fall into patterns or groups. The pupil should be encouraged to keep his/her hands nearly over the **Home** keys i.e. **A, S, D, F** (left hand) and **J, K, L;** (right hand). They should also be encouraged to think of the keyboard as being divided (roughly) in half but should not be required to use particular fingers.

The following patterns of groups of letters should be pointed out.

- **A** on its own and **B** on its own with the **left hand**.
- Then **C, D, E** are one above the other, starting from the bottom line.
- **F G H** are in a line.
- Change to the **right hand** and, with **I** in the line above, **J, K & L** are easily put together.
- **M & N** are together on the bottom row;
- **O & P** are together on the top row.
- From here on, it is more difficult but there is still a pattern.
- With the **left hand** press **Q & R**, then **S, T & U**. These are all on the top two lines.
- **V, W, X, Y & Z** make a criss-cross pattern between the top and bottom rows only, but, as they are less often used than the other letters, they may be remembered as oddities. The **left hand** is used for all of these.

Punctuation marks have to be learned separately and this should be done in conjunction with appropriate grammar work and other creative writing.

Strategies for using this method

It is recommended that each pupil should type about five alphabets (or use this method for 5, or up to a maximum of 10 minutes each day), using a timer and noting down only a better score than before. For example, if a child has previously completed the exercise in 35 seconds but today manages to do it in 34 seconds on one attempt and 37 and 39 seconds on another two attempts, only the score of 34 should be recorded. This ensures that the child feels a sense of achievement. **Improvement** is the only thing recorded.

There should be **no competitive element** between pupils in this exercise at all but, if it is followed without a break for two to three weeks, a considerable improvement in concentration, confidence and speed in finding appropriate keys in other writing tasks should be observed.

The whole-class experiment

The experimental procedure

Both Year 6 classes at Alban Wood Junior School took part in the experiment. At the outset it was explained to the children of each class that they would be doing some exercises during the next few weeks to improve their keyboarding skills and that the time that each took to type the alphabet would be measured before, and at the end of, the exercises. It was emphasised that it was not a competition; the object was to improve each individual time.

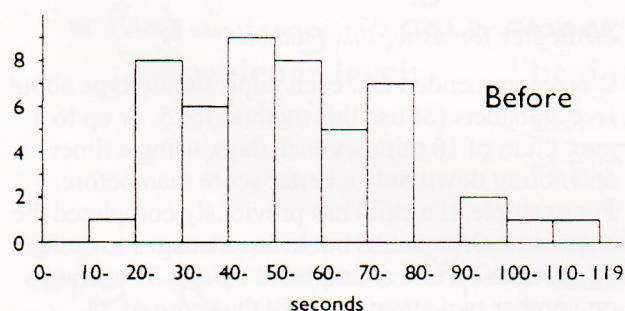
Each child's time was measured on a BBC microcomputer using the program *Qwerty*. A careful explanation, and the opportunity to ask questions, was given individually to each child before the measurement, and the non-competitive nature of the exercise was re-emphasised.

A class set of paper keyboards had been printed and placed in plastic envelopes. The children typed the letters of the alphabet on these as a class exercise led by their teacher using the strategy described above for about 5 minutes on most days over about 4 weeks.

Finally each child's time was measured again using *Qwerty*. The individual improvement was described and the child congratulated. Each class was congratulated and thanked as a group.

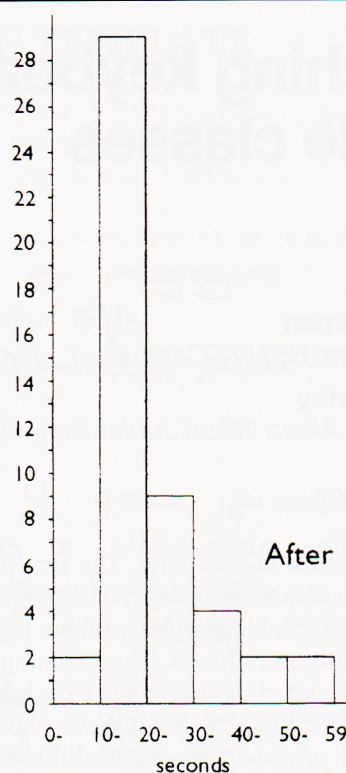
Results

48 Year 6 children took part in all three parts of the experiment. Two histograms, **Before** and **After**, are shown; times taken, grouped in blocks of width 10 seconds, are drawn with the number of children shown vertically.



Every child improved; the ratio of individual **after/before** times, expressed as a percentage, varied from 8% (12 times as fast) to 74% (one and a third times as fast). The average ratio of **after/before** times was 39% (2½ times as fast).

It was noticed during the **after** testing that a relatively greater proportion of one class typed with one finger on each hand than in the other class. It is regretted now that a note was not kept of children using one finger throughout the **before** and **after** tests.



The software reported the number of mistakes as well as the time. Totals were 31 mistakes in the **before** tests and 21 in the **after** tests. The children who made two or more mistakes **before** tended to make at least one mistake **after**.

Conclusion and recommendations

There was a remarkable improvement in the keyboarding skills of **all** the children involved. All the children enjoyed taking part and each showed pleasure at the improvement (as they should; the individual child had done the work and improved an individual skill).

The experiment has demonstrated that this strategy used with paper keyboards is an effective way of teaching basic keyboarding. It is cheap and time-efficient; the time spent will be more than recouped later when using a computer for, say, word-processing.

However, it was observed that a minority of children still were using only one finger, or one finger on each hand. Some of these produced the greatest absolute (but not percentage) decreases in time.

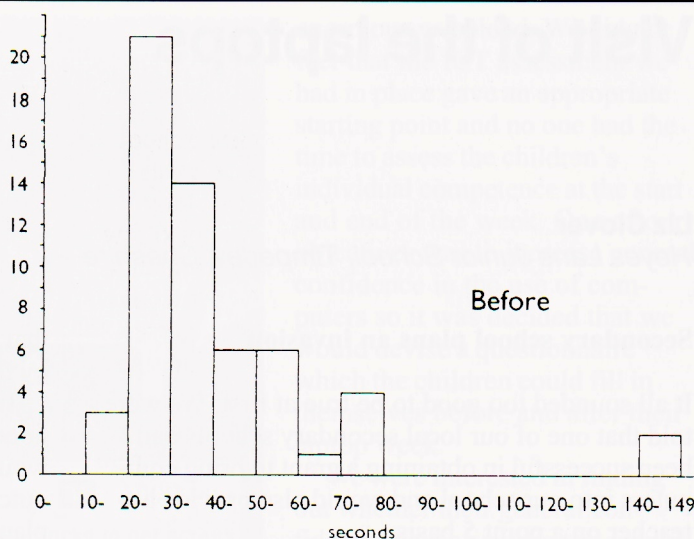
It has been recommended that:

- the method be used in all classes in the school as soon as practicable;
- a one-week refresher course be given, particularly in the earlier year classes, early in subsequent terms and timings be recorded to test its efficacy;
- one-fingered typists be identified and regularly reminded to use many fingers on both hands.

The software

Qwerty was written for the BBC computer some years ago. It provides copybook-style exercises in keyboarding using appropriate textfiles; the time taken and number of mistakes made are reported. An extra textfile **abc** containing a lower-case alphabet was added for this experiment.

!AWAlpha for Acorn computers was written during the experiment. It is an exercise in keying a lower-case alphabet; the time taken and number of mistakes made are reported. This program is easy to use by children for self-testing and now is available on all the Acorn computers in the school.



The keyboards

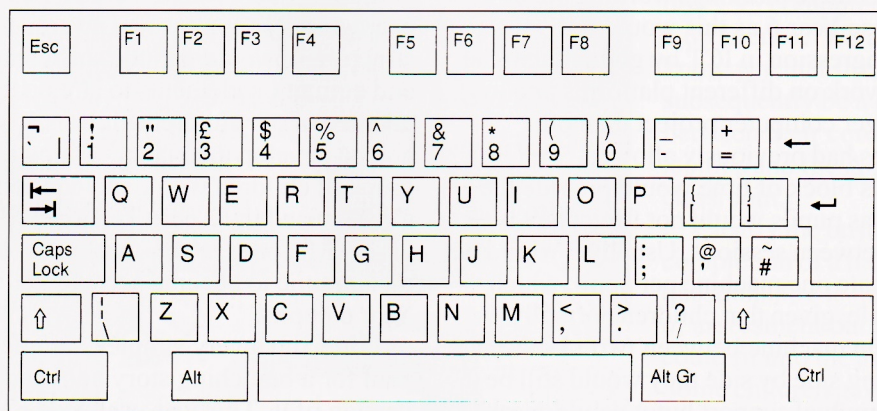
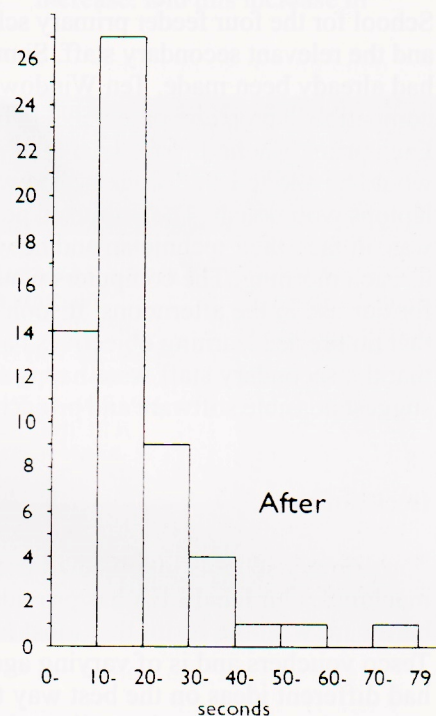
The keyboards were drawn as drawfiles on an Acorn computer and printed as large as possible on a BJ10ex printer. A keyboard for the A3000, A4000 & A5000 Acorn machines was printed on one side of the sheet and a keyboard for the A7000, RiscPC and standard PC computers on the reverse. By omitting the keys to the right of the RETURN/ENTER key the remainder could be reproduced at 95% of full-size.

Postscript

The OFSTED team has been, gone and reported, and the two Year 5 classes at Alban Wood Junior School have carried out the same keyboarding learning strategy as that carried out by Year 6.

The results, shown in the form of histograms, indicate again a substantial improvement (the average ratio of **after/before** times was **46%**). This is not as great as with Year 6 but, if the two sets of histograms are compared, it can be seen that Year 5 started out as more competent performers (apart from two individuals) than Year 6.

All the children enjoyed the time element in the exercise and requested (and have received) *!PenDown* texts of the *The quick brown fox . . .* variety to copy with a timing program running alongside. The fact that they continue to ask to use these exercises and *!AWAlpha* during wet play- and dinner-times is the ultimate seal of their approval.



Visit of the laptops

Liz Clover

Heyes Lane Junior School, Timperley, Cheshire

Secondary school plans an invasion

It all sounded too good to be true at first. We were told that one of our local secondary schools had been successful in obtaining a grant to bring computers into our school and would also provide a teacher on a point 5 basis.

A meeting was arranged at New Wellington High School for the four feeder primary schools involved and the relevant secondary staff. Some decisions had already been made. Ten Windows 95 PC compatible laptop computers would be purchased. Each primary school, irrespective of pupil numbers, would be allotted an 8 week period when the laptops would visit. The promised point 5 teacher was, in fact, their technician and he would be with us each morning. The computers would be available for our use in the afternoons. It soon became clear that no precise learning objectives had been set and that the secondary staff were happy for us to suggest possible software and projects.

Decisions

The primary schools involved all use Acorn machines. Our local LEA has provided little hardware with the result that most has come from Tesco vouchers and is of varying age. Each school had different ideas on the best way to use the proposed resources and we all needed time to think about this.

We are a large school and the time allotted was just sufficient for us to give each of our Year 6 pupils five consecutive mornings working on the laptops. We chose Year 6 as this would best contribute to progression in ICT by giving them the opportunity to work on different platforms and to undertake a longer computer project than our limited resources had previously allowed. We felt that a continuous block of time would provide the best experience as pupils would not forget newly learnt skills in between sessions. Usually it would be possible to allocate one machine per pupil, which would be valuable, given that children normally have to share one machine between two. As they would be working side by side they would still be able to provide mutual support but it would mean

that there would be no monopolising of the mouse by the more confident.

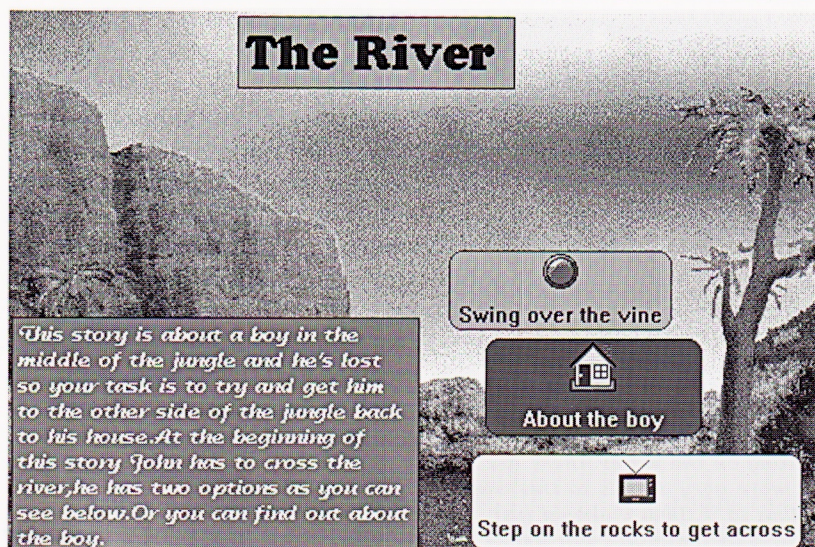
It was decided that story writing would provide a good area for a project covering this time-span and would give ample scope for differentiation by outcome. This also fitted well with Year 6 long term planning so we formulated our learning objectives for the project to include both English and ICT. We hoped that the children would gain some experience of using a different operating system but would also have the time to become sufficiently confident in using one piece of software to make good use of it as a tool rather than just briefly experiencing some of its features.

Multimedia authoring

We were selected as the first school to take part in the project and the technician, Mr. Jones, came to visit us to look at the teaching area we proposed to use for the laptops and to see the sort of work we were currently doing. We were fortunate in having a central area with sufficient plug points which could be allocated to the project for the mornings. Whilst chatting with Mr Jones after the initial meeting, we had expressed an interest in trying to do some multimedia work. I showed him some work on the Acorn version of *Hyperstudio* that a small group of my Year 5 pupils had done last year and his resulting enthusiasm helped him to win the case for buying the PC version of *Hyperstudio* and machines of a high enough specification to run it.

Our project could now take the form of a branching story which would be used to develop character descriptions and awareness of plot structure. It would include sufficient graphics, sound and animation elements to stretch even the most talented of our children whilst motivating the less able to develop their story writing ability. The first group of children would include some who had already used the Acorn version of the software giving Mr Jones, a non-teaching secondary technician, time to become accustomed to working with Year 6 pupils.

I drew up a very simple example of a flow chart plan for a branching story and made a *Hyperstudio* version of it. This was used to show the first group



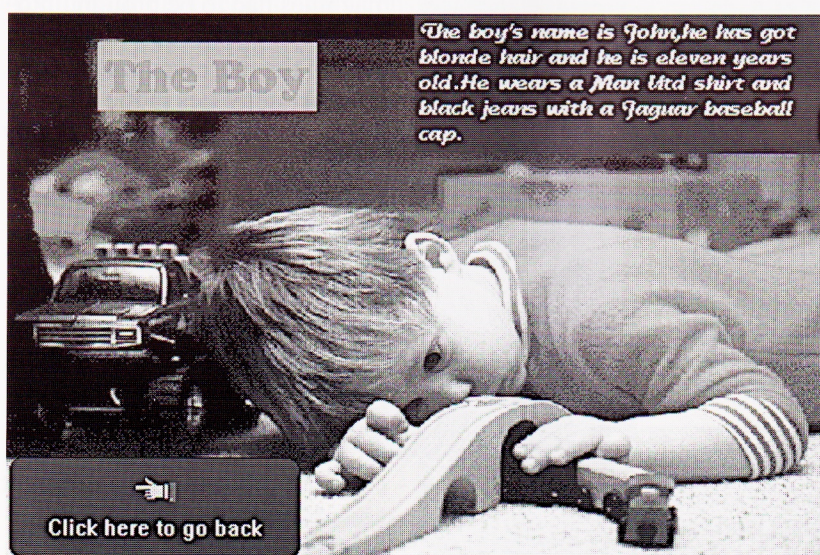
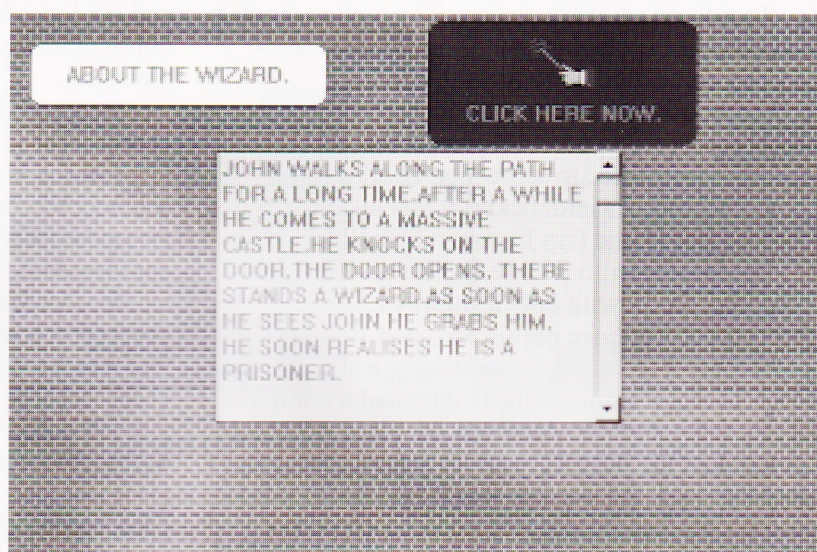
of pupils what they were aiming for. They were asked to draw up their own flow chart for a branching story. It was to be kept fairly simple at first and must include at least one page for detailed character description. They were to have their plans ready for the start of their 'Laptop week' the following Monday.

Finding time for assessment

We had been asked to do some form of assessment as an indicator of the success of the project. There had to be a snag! The Year 6 teachers involved still had to teach the remaining 20 children in the class and already had an

enormous workload. We did not feel that the ICT assessment we had in place gave an appropriate starting point and no one had the time to assess the children's individual competence at the start and end of the week. One of our objectives was to increase general confidence in the use of computers so it was decided that we would devise a questionnaire which the children could fill in themselves before and after their laptop week.

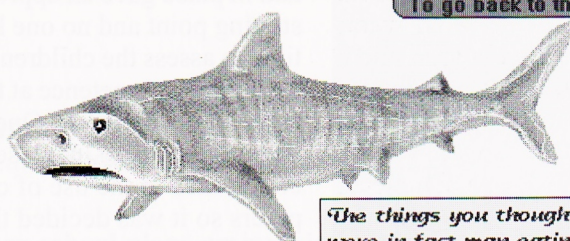
We were interested in finding out whether their general confidence in using computers would increase. Did this increase in




confidence depend upon existing levels of confidence in using the Acorn machines in the classroom? Would having access to a Windows 95 computer at home make a difference? We also wanted to know whether there would subsequently be a difference between their confidence on the laptops and the Acorn in the classroom.

Clearly the unsupervised completion of a hastily compiled questionnaire is not the best form of assessment but it was all we could fit into the available time. Some children gave less than honest answers to the questions,

The Sharks




To go back to the first page

The things you thought were rocks were in fact man eating, evil looking, very hungry Sharks! So I think it is safe to say that you haven't got very far, instead you have been made into a carcass floating on the water. There are far more gory details to this tragic ending so I think I should just leave it at that, don't you think?

but it did give us some indication of their confidence levels at the start of the project. The replies showed that 86% of the children had some form of computer at home, with 36% having Windows 95 PCs. The most frequent use was for games with occasional use of CDs and word processing. The children were asked to score their confidence levels on computer tasks undertaken at school using 5 as very confident and 0 as having no recollection of being taught how to do a task. This showed an average of 2.76, with only a slightly higher average of 3.1 amongst those pupils who had Windows 95 machines at home and, interestingly, a slightly lower average amongst those who had a computer of any type at home. Amongst the class who had undertaken the most IT work in school during the previous year, the average was 3.24.

Better than working

The first group of children soon remembered how to use *Hyperstudio* from their previous short experience and quickly took advantage of many of the different 'bells and whistles' offered by the software. It was a great advantage to have an expert on hand to sort out technical problems. Mr Jones seemed to enjoy working with such an enthusiastic group of children and good results were soon being brandished during break times. I tried out many interactive stories which frequently resulted in my fictional death! By Friday, finished stories were

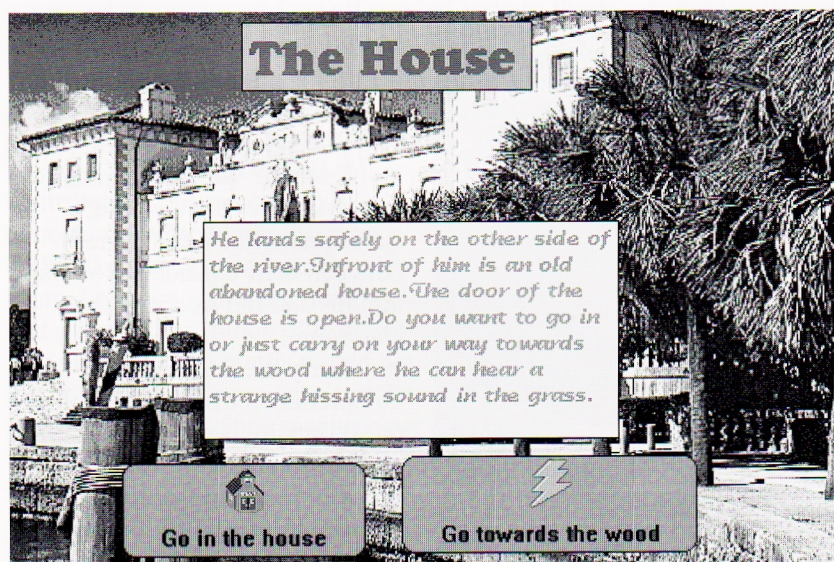
available to be shown to the following week's group and Mr Jones had begun to supervise the printing out of numerous completed pages for subsequent mounting.

All the children enjoyed their week on the laptops. The groups were selected by general ability level and as Mr Jones grew more experienced in teaching the children so the less able children were given their turn. This worked well and children of all abilities produced something to be proud of. The children were keen to tell me how much they had enjoyed it, how good they all were at it and how much better it was than 'proper work'.

Some unexpected problems

I was able to give my Year 5 class some experience of the laptops during the occasional afternoon session. This did prove more difficult to organise

than I had thought as the machines had to be brought into my classroom because that area used in the mornings was needed for other activities in the afternoons. Saving the work to floppy disc for later printing meant attaching a floppy disc drive to each machine in addition to plugging in the mouse. We also had to pack them all up at the end of the session. This was time consuming and proved off-putting for less enthusiastic members of staff. Nevertheless my class had the experience of using a different word processor on a different type of computer, hopefully increasing their ICT capability.



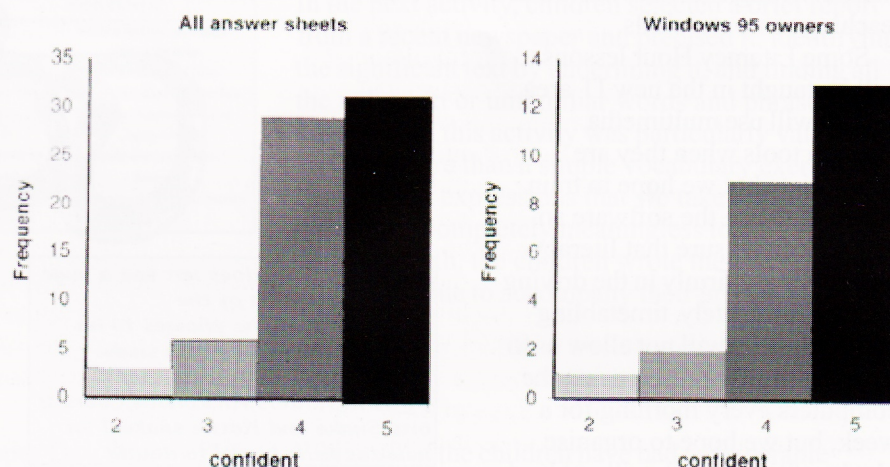
All of this enjoyment came to an untimely end when the school was broken into and five of the laptops were stolen, perhaps as the result of some publicity in the local paper. Although replacements were fairly quickly provided, there was not enough time remaining for all our children to take their turn before the laptops had to move on to the next school. The paperwork involved in the insurance claim was horrendous and Mr Jones had to start bringing all the hardware with him each day and taking it back each lunchtime, thus decreasing the available 'hands on' time.

Learning outcomes

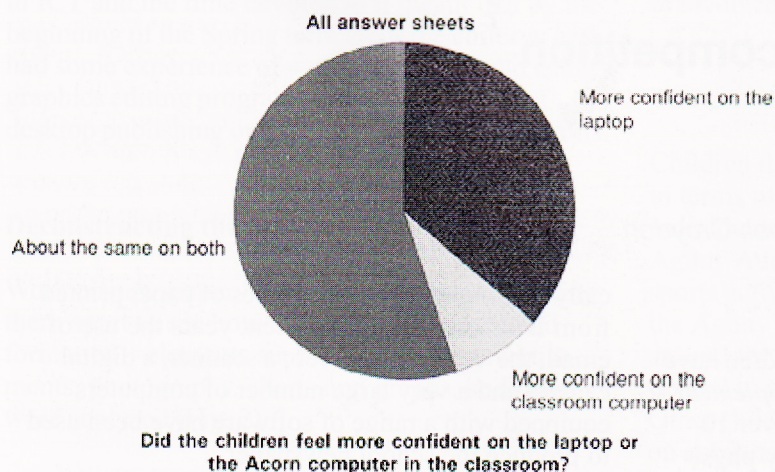
Having taught children to use multimedia authoring software on one classroom machine, the use of a group of machines for an extended period did seem to be a more efficient way of introducing such work. The lessons of a classroom demonstration are soon forgotten by those whose 'hands-on' opportunity does not arrive until the following week. Watching the children at work and reading the completed questionnaires has convinced me that children adapt quickly from one type of computer to another, realising that the basic principles remain the same. The children were asked to rate their increase in confidence on a scale of 1 to 5 and the average for the whole group was 4.3. This did not seem to vary considerably depending on previous confidence levels. The children

with Windows 95 at home showed an average increase of 4.4 in their confidence and the class that showed the most confidence in school ICT work gave an average increase of 4.2. Over half the children said that they had about equal confidence on classroom and laptop computers at the end of the project. Given that they had just had a six week break from the classroom machines and had only just completed their laptop work this shows a commendably flexible approach amongst children who will doubtless have to adapt to many different operating systems and new technologies in their educational and working lifetimes.

Graphs to show how much the children felt their confidence in using computers had increased after a week on laptops



0 = no increase; 5 = a lot more confident.



Feelings about the project amongst the Year 6 staff were generally positive but there were some reservations. There were benefits in having a smaller class when a group was out having 'Laptop time', but it was felt that the experience would have been far more beneficial if there had been cover to enable class teachers to become more involved with the English strand of our objectives – something which we could clearly not expect of Mr Jones. Because they were not closely involved in the work, the class teachers did not feel that it was possible to achieve the English objectives. Had six more machines been available, it would have been possible for all the children to work on the computers at once, albeit two to a machine, and the class teacher could

then have been fully involved. Indeed, had training been given, and Mr Jones been on hand for the initial set up, the teachers could then have taken charge of the project with only occasional technical advice needed if hardware faults occurred.

Using the government's money

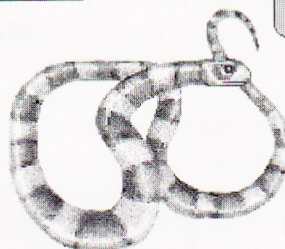
We have been included in the first wave of government funding for the National Grid for Learning and the experience gained from the laptop project has helped us to make decisions about spending this much needed money. We have redistributed our library in order to create space for a network of computers that a whole class can use at once, albeit sometimes having three children to a machine. We are also investing in a large screen for such things as shared writing exercises as well as teaching computer skills.

Some Literacy Hour lessons will be taught in the new IT area and we will use multimedia creation tools when they are appropriate but we hope to train our staff to use the software so that we can be sure that literacy objectives are firmly in the driving seat. Unfortunately, timetabling considerations will not allow us to have the same children using the computers every morning for a week, but we hope to organise blocks of time which will not lead

to a large time lapse before children can practice what they learn. It may be that work begun in literacy hour sessions could be linked and enhanced in longer sessions later.

With feelings of resignation rather than enthusiasm, we are buying PCs for our new IT suite but we will still be using Acorns in the classrooms. It is clear from our experience that the children will not find this to be a problem. In fact it may have the effect of increasing their confidence and adaptability. Should a secondary school technician be available to work alongside our staff for the first few weeks, however, I am sure he will be welcomed with open arms – with or without the laptops.

The Snakes



WRONG!! John does not see a huge pit in the middle of the wood. Suddenly he plunges to his death in the middle of a snake pit. He is now surrounded by Pythons, Adders, Anacondas, Cobra, Coral Snake and Rattle snakes! In minutes he is bitten to death!



[Click here to go back](#)

Producing a school newspaper

Downsview Primary School's entry for the *TES Newspaper Day* competition

Robert Kensit

Formerly of Downsview Primary School, Croydon

Introduction

Downsview Primary School's Year 6 children have participated in the *Times Educational Supplement's* annual Newspaper Day competition for over 10 years. The first entries were assembled by physi-

cally 'cutting and pasting' pieces of paper printed from BBC computers. In recent years the use of email, the World Wide Web, a scanner, a digital camera and a very large number of computers equipped with a range of software have been used to produce the school newspaper.

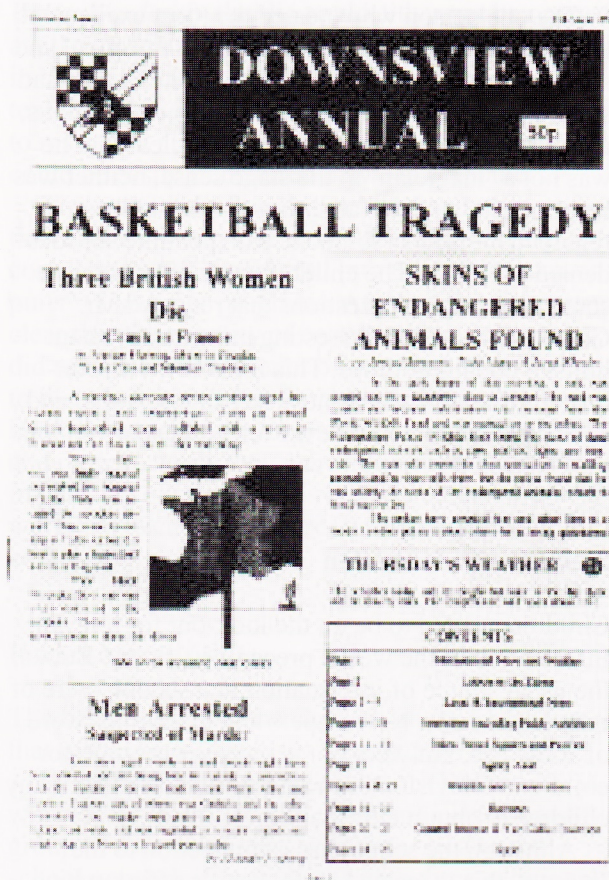


Fig. 1. The front page.

The start of term

Preparation began for Newspaper Day, March 11th, at the beginning of the Spring Term. At the start of the term I revised research skills and how to use non-fiction and reference books with my Year 6 class. During the previous term, as part of the class's geography and history work, I had focused on note-taking from various sources (including television), and the writing of reports and summaries. The extent of the school's present resources in ICT and the time devoted to it meant that by the beginning of the Spring term all of the children had had some experience of word processing and using a graphics editing program, and several had used desktop publishing or hypertext authoring programs.

Deconstructing the newspapers

Work on newspapers began by quite literally taking them apart to see how they were structured and formatted – elements such as headings, advertisements, photographs, charts and graphs, and maps were analysed (Fig. 2).

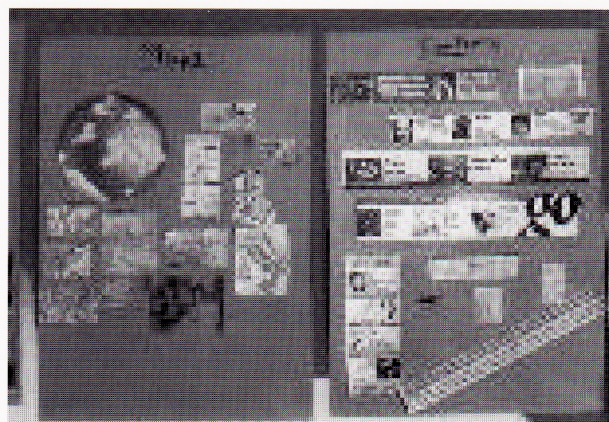


Fig. 2. Different elements of newspapers were cut out and compared.

Synthesising the text

In the next activity, children selected a brief report from a recent newspaper and précised it, identifying the significant text by underlining it, and finding all the unknown or unfamiliar words and phrases. The latter part of this activity was particularly valuable, and was more than a simple vocabulary exercise. Phrases and expressions that we take for granted were often completely meaningless to the children. To finish with, the children wrote their own appropriate headline to accompany their précised article.

Reviews

Whilst all of the children have had considerable experience of writing book reviews, they were now asked to produce reviews of a wider variety of media: film, television programmes, computer games, and music. Not all of the resulting writing (completed for homework) could be included in the newspaper, and a group of children took it upon themselves to select the best. This process in itself extended the children's skills in critical appraisal and resulted in a great deal of involved discussion and decision making.

The contents

Children then began to select areas of interest both in terms of subject matter and type of feature, individuals taking charge of the letters page, the Agony Aunt column, reporting on school music and sports activities, and so on. Requests for letters to the Agony Aunt and to the editor were posted around the school. Parents and local contacts were invited to place advertisements in the newspaper. Other children began researching and writing articles on subjects that interested them: various sports, animals, and recent events. A perennial favourite is

to conduct surveys. This involves work on preparing questions, designing survey charts, collecting the data and entering it on a spreadsheet, and finally producing graphs. The children had some difficulty selecting an appropriate subject for a survey, drawing conclusions from the results and suggesting explanations (all good science AT1 experience). One group used a spreadsheet prepared on a Psion 3c palmtop personal organiser, entering the data directly as they moved from class to class. The data was then transferred directly into the spreadsheet program in a PC.

Interviews

With Newspaper Day still a month away, we began to follow up contacts for potential interviews. Some of these were organised through relatives, the children arranging and conducting the interviews in their own time. Other pupils in the school also became involved; the boxer Lloyd Honeyghan and a jumbo jet pilot both came into the school to be interviewed, the former having his photograph taken for inclusion in the newspaper. A contact who works for News International was able to obtain telephone numbers for several prominent politicians and actors. Not all of them responded to our inquiries. Among those who did were the television actor Ross Kemp who was interviewed by telephone several weeks before Newspaper Day, and Lord Archer and Paddy Ashdown who were interviewed by means of fax machines.

All the children participated in drafting appropriate questions for each potential interview candidate. Whilst many questions could be easily applied to more than one candidate (*how old were you when you decided to be a politician/actor/singer? . . .*), the children had to start with a clear idea of the candidate's profession. In some cases this could be quite difficult.



Fig. 3. Lloyd Honeyghan was interviewed for the paper.

The one person who created the most excitement, and for whom questions had to be both original and sensitive, was Yuri Gellar. Most of the children had some idea of who he was and why he was famous, although it was necessary to make it clear that he was not a 'magician' in the stage sense, neither was he primarily an entertainer but that he, at least, regarded himself as someone with genuine abilities denied to others. The children were able to create some very original questions that required Mr. Gellar to give some interesting information about himself and his abilities. This interview was conducted 'live' via telephone, necessitating rapid and concise note taking while the telephone conversation took place.

Sources of information

Children needed to be on the look-out for relevant information in the weeks preceding the day. Books, the usual source of information in a school, were of only limited use. Newspapers and magazines were of some use, but were not always appropriate for children. Television or radio were not used by many children to obtain information.

Although the school has a connection to the Internet, this is located in the head's office, which means that children and staff have very limited access to it. As a result, the Internet is not yet regularly used as a teaching resource and even for this kind of Year 6 project, it made little impact. However, it did allow me to obtain up-to-date information, including photographs, for those children who were finding it difficult to obtain sufficient information for themselves. Reports on the previous weekend's gymnastics event in the USA, and the Winter Paralympics which were taking place on Newspaper Day were obtained in this way. One parent was working in Nagano during the Winter Olympics and was able to send exclusive photographs of the games by email.

The week before

Three of the most recent PCs in the school, which contained the DTP program Microsoft *Publisher*, were moved into one room alongside each other. Each one was loaded with a template based on the previous year's newspaper, and all three were linked to inkjet printers. One computer would assemble pages 1–10, a second pages 11–20, and the last page 21 onwards.

All the children have their own floppy disks, allowing them to make use of any computer. An ongoing problem was that of transferring files between different word-processing programs (*Word*,

Write, Wordpad); the file could either not be opened at all or when it was opened the conversion resulted in blocks of unwanted gibberish appearing in the text. In hindsight, it would have been more practical to insist that all work was saved as .txt files which could be easily transferred between computers.

The sum total of work produced so far (stored on the children's own disks) was checked, and any completed work transferred into one of the computer's *Publisher* programs. At this point, it became clear that the quantity of completed work on disk did not reflect the amount of time and effort given to the whole project so far. Although the children had been taught how to use disks and how to save and retrieve work, they were still very inexperienced in carrying out these kinds of tasks and a lot of work had been lost, deleted, wrongly named or not completed.

Friday March 6th

The head briefed all the children on the procedure that would be followed on Newspaper Day itself.

Every available computer in the school was wheeled on its trolley into the year 6 classrooms. A group of four computers was connected to the school network in both rooms with three additional standalone computers in one room, and four in the other – plus the three already set up to produce the newspaper itself.

Monday, March 9th – Tuesday March 10th

From Monday children were admitted into the classroom from 8.00 a.m. onwards, and all had to get down to either researching and drafting articles or word-processing work for the newspaper. Short items, jokes, wordsearches, and 'did you know' items were as valuable as long articles. The children were now entirely responsible for 'their' own newspaper, and were required to support each other in researching and gathering information, checking and re-drafting work as necessary. A grid of rectangles, each one representing a page of the newspaper, was drawn onto a whiteboard, and as articles were placed, they were blocked off on the whiteboard. Advertisements were placed as they arrived. Images were scanned in or downloaded as required, and if necessary were converted into black and white using a graphics program, which then optimised the brightness and contrast ready for publication.

Completed articles and graphics were placed into appropriate pages in the newspaper, and by the end of Monday, nearly a third of the newspaper pages



Fig. 4. Reading local newspapers.

were allocated. By the end of Tuesday, almost half was filled, and the first complete pages were being printed off and sent to the office for photocopying.

The Day – Wednesday, March 11

The morning

During the morning, articles and graphics continued to be placed in the newspaper. Governors, elder siblings and parents made themselves available to help while the head and I supervised the final process of desktop publishing the material into the appropriate pages. That morning's newspapers were scanned for interesting and breaking stories which, if appropriate, were taken to be rewritten and commented upon by children, usually directly on a word processor. The fax with Paddy Ashdown's replies to our questions arrived that morning, and the Yuri Gellar interview took place at 10.00 a.m. Current news was made available for downloading by the organisers of the competition, but we found the format of this information made it very difficult for the children to select and download themselves. Piece by piece, pages on the white board were filled and then erased altogether as they were completed and printed. In the school office, completed pages were sent through the duplicator.

Noon

At midday, everyone stopped to listen to the news on the radio to find out the very latest, and to decide which stories should go on the front page. It so happened that on this day no major incidents occurred, and the children decided that the front page was to be shared between a report about a coach crash in France, a women's basketball team, and a large number of illegally acquired animal carcasses being found at a taxidermist's establishment.



Fig. 5. *A final check before printing.*

The afternoon

After lunch, the front page reports were written and placed. By 2.00 p.m., only two pages remained incomplete, and while a small group of children finished these, I had the unenviable task of settling the rest of the class down and keeping them gainfully occupied for the remainder of the afternoon.

Most of the children chose to stay on to help collate the pages, although there was little for them to do until the final pages had been duplicated. They picked up a single copy of each (double-sided) page and took them to the office to be stapled. The first complete newspaper was assembled at 4.00 p.m., and half an hour later all the children went home with their own copy, giving us half an hour in which to get one posted to the *TES*. In previous years a final single copy was not ready to be sent to the *TES* until the very last minute (it must be post-marked on the day) and duplicating the newspaper carried on until later into the evening.

Postscript

I ensured that throughout the project, every piece of evidence, including all draft notes, letters, cuttings and documents were kept and filed, so that the process of the children's work could be documented. This material is to be used by the children

to make a presentation for inclusion on the school's Website in which they will record and describe each stage of the newspaper's production.

Conclusion

As with any subject matter in the primary curriculum, it is the process of learning and the skills learned and utilised that are really important, not the end product. This is especially true in ICT, where the opportunities are created to develop children's thinking, problem solving, organisation, planning, and a wide range of presentation skills.



Fig. 6. *Reading the finished publication.*

The school as a whole can rightly feel very proud of the end product. It serves to heighten a degree of pride and to develop a sense of identity within the school and the community. This project has done a great deal to develop the Year 6 children's self esteem. A substantial amount of curriculum time was devoted to this project but as the emphasis throughout has been on literacy, it should be quite easy to accommodate such an endeavour into the new statutory curriculum.

Once in the academic year it is worth taking on a large-scale project which will challenge the children and the staff, and ICT can provide many opportunities to do this.

Apology

MAPE Focus on Literacy

ICT and the Literacy Hour by Amanda Davey and Jackie Marsh.

On the Contents page of the MAPE Focus on Literacy Jackie Marsh's name was not included as co-author of this article. MAPE apologises for this omission.

Net so easy!

Ray Potter and Tina Costello Judge

Senior Lecturers in Education, University College of St Martin, Lancaster

It is a new term and the thoughts of many a school ICT co-ordinator may be turning to the possibilities of Cyberspace. In the last year or so the World Wide Web in particular has matured into a stable, cost-effective medium which allows pupils access to a broad range of exciting, easily navigable and largely free material.

Those teachers who have used the Web are invariably convinced by its potential and only deterred by the initial and, more importantly perhaps, the associated ongoing costs. This is no doubt why fewer than five per cent of UK primary schools are currently connected to the system.

Although many LEAs are working feverishly to set up county wide systems, those schools who simply cannot wait may wish to forge ahead and organise a partnership with a local institute of Higher Education. All HEIs are permanently connected to the Internet via the Joint Academic Network (JANET) and may well have one or two spare external lines that can be made available on a limited basis provided no charge is made for the service.

Tatham Fells CE Primary, a small rural school in a remote part of North Lancashire, was recently connected in this way to the University College of St. Martin. For the price of Windows 95 or 98 and a fast modem, currently as little as £30, the school gained access to the full facilities of the Internet, including an email account.

A little lateral thinking avoided the need for a new telephone line at £99 or a massive £400 for ISDN. Mindful of not blocking important incoming calls to the office, the school chose to utilise the existing telephone line to the kitchen that was otherwise unused during the late afternoons. After lunch is inevitably the slowest time of the day in the UK since much of America is now awake and on-line. Nevertheless one hour on the web each day resulted in increased call charges of a modest £11 per week. Also, for a one-off fee of £10, the dialled number can be added to the business equivalent of BT's successful Friends and Family scheme, which entitles users to a ten per cent discount on nominated numbers.

Another route for the undecided might be to arrange an Internet activity day with a 'tame' HEI. Many schools, as a result of student placements, have increasingly close ties with their local Uni-

versity or College. Given a suite of computers, a whole class and several teachers could be reasonably introduced to the Internet in a single day.

Recently all twenty-eight pupils from Tatham Fells CE Primary school visited the University College of St Martin computer department for a day of this kind. Within minutes, children as young as five were intuitively surfing the Web and acquiring the language of the Internet with a speed and ease which astonished college tutors and seasoned teachers. Towards the end of the day children had the opportunity to work on more open-ended tasks and many became proficient in simple searching techniques. Up to date, relevant information was explored in a meaningful context that provided for high levels of collaboration and discussion. If the teachers and parents who accompanied the pupils were not convinced by the educational potential of the Web at the start of the day they certainly were by the end.

A new development is for St Martins to provide local schools with lists of web sites that can be used either by busy teachers or their pupils as starting points. One such list can be found at: <http://www.ucsm.ac.uk/staff/rays/links.htm>. Here you will find quality sites vetted for their content and tolerable download times. The school is now very keen to collaborate with St Martins on the production of its very own home page.

For those schools who are prepared to consider the installation of a new line **and** don't have ready access to a local HEI another option might be the BT Schools Internet caller service. This allows unlimited access during school hours in term time to BT's Internet service. The charge is £445 a year for a standard analogue line or £790 for the faster ISDN. The latter would also allow for the setting up of a small Intranet. Alternatively, from September, schools as well as home users can choose to avoid regular standing charges altogether with the new BT 'Pay as you go' scheme. This is a straightforward system, which allows you to spend time on-line for a little as one penny per minute on top of the normal local call charges.

So perhaps this will be the year for more schools to take those first tentative steps into cyberspace. After all it may no longer be the dawn of networked computing in schools but it is fast approaching breakfast – can we afford to wait until lunch-time?

How effective is the internet in supporting children's learning?

Chantal Teahan

Student Teacher in Birmingham

The school

The school in which our group of three students was placed was very well resourced in terms of ICT, including Internet access. We felt that focusing on the Internet as a resource would be very interesting; not many schools are, as yet, privileged enough to be connected to the World Wide Web. The Internet is a relatively new development, therefore there is little published information on its use in schools.

The children we were teaching were a mixed Year 4 and 5 class who had not as yet had experience of using the Internet. We planned, after discussion with the IT co-ordinator, to teach groups of three children at a time. Gender was not an issue of our research. However, we wanted the children in the groups to have equal opportunities of using the computer, and we were advised by the IT co-ordinator that occasionally mixed gender groups can inhibit this.

Planning

Through discussion between the Information Technology co-ordinator, the class teacher and ourselves the focus of the assignment was identified.

We planned to follow the teacher's scheme of work for the topic area, Britain since the 1930s, which specified using the Internet, as shown in the table below.

The class teacher had not yet introduced the Internet, so we planned a series of activities which could be used for this topic, and then easily be adapted for other themes.

We knew that before we began to teach the children about the Internet, we ourselves needed to know what was available on the subject of Britain since the 1930s. This was not only for the children's benefit, but to aid us in planning activities suitable for new users of the Internet. This is clarified by Angela Corbett (1977) who said that:

In order to make the best use of this limited time, all users (teachers and students) must have a clear idea of what is to be gained from the Internet session.

So before we began to plan, we spent some time researching different methods of reaching the information, and then we read through the information checking its suitability for the activities.

<p>Communicating and Handling Information Children will generate, amend, organise and present ideas. They will save data and access stored information following simple lines of enquiry. Children will combine different forms of information.</p>	<p>Britain since the 1930s – The pupils will examine/create a table containing data relating to employment figures from 1930 to 1990. The figures will show number of males and females in paid employment, and unemployment figures every 5 years. They will enter this data into a spreadsheet file using <i>Spread-IT</i>. Graphs will be plotted to show trends (other social trends can be included) and the pupils will discuss possible reasons, e.g. the number of women employed during the war increases because they supported the war effort by doing jobs which men had previously done. Increase in TV ownership etc.</p>	<p><i>Spread-IT</i> (L2) <i>Word-IT</i> (L3) <i>Data Base</i> 1930–</p>
<p>Building upon previous skills – use the more advanced functions of a word processor, including combining graphics and text, changing justification, marking sections of text for deleting, moving and copying.</p>	<p>The pupils will use <i>Word-IT</i> (L3) to report on their findings and paste relevant graphs into the documents to illustrate these.</p>	
<p>Support Learning</p>	<p>Use internet to research project.</p>	<p><i>Internet Link</i></p>
	<p>Encarta Using research skills to find information based on topic.</p>	<p><i>Encarta</i></p>

We created an instruction sheet which the children could follow, and by adapting our originals they could create their own sheet which would be used for other groups.

How we reached the topic of Britain since the 1930s on the Internet

Switch on the computer
Click on RM
Click on Netscape Navigator Gold
Click on Pathways
Click on Pathways for Pupils
Click on Topic Word Search
Type in war
Click on Narrow Down Search
Type in world
Search for relevant information on the given topics.
Topics we found interesting:
Rationing
During the War
Utility Clothing
Identity Cards
Bristol at War

We provided the children with a question sheet, which had to be answered using information found on the Internet, and one for research using books. This was so we could compare the children's thoughts on using the two different sources of information. The children would also create their own question sheet for others to use.

By using the internet see if you can find the answers to the following questions . . .

Rationing during the war:-
Who wrote the book 'Noah's Castle'?
What food was a luxury to have in the 1930s?
Why do you think dentists had a hard business in the 1930s?

Utility clothing:-
What silk was used for wedding dresses?
What was used instead of silk stockings? Why?
What was fashionable with models in 1941?

Identity cards:-
Who were Purdown Percy and Big Bertha?
What would you do if you lost your identity card?

What hobbies do you have? Can you find out something about them on the internet?

Problems

The IT co-ordinator approved our planned hour-long sessions connected to the Internet, and we did find that this was long enough in some lessons. However, in other lessons we had problems with the Internet connection itself. The first was with finding the topic area by using the first instruction sheet. The topic area had moved after only a couple of

weeks. This proved to be a problem when the children began to follow the instruction sheet and could not get to where we wanted them to be. We had to think on our feet and work with the children to find the pages we needed. This wasted valuable time, but was soon overcome. From this we had to create another instruction sheet to use with the next group. The other major problem we had with timing was that we frequently lost the Internet connection and had to re-connect every 10 minutes. This could not be avoided, but it was something for which we were not prepared.

Managing the task

We had use of a spare room with an Internet connection point. This made it easier for the children to concentrate on the tasks, and for us to observe and support them without the distraction of background noise.

During each lesson we had two people working with the children, and one member of the team observing the children, and ourselves. This changed every week. The main method of observation we used was Systematic Observation which:

is a way of observing behaviour in classrooms by using a list of categories [which are] checked off as the behaviour is observed.

(Pollard and Tann, 1987)

This seemed to be the most appropriate, so that we could see which children needed most help in using a computer.

OBSERVATION OF 'A', 'D' & 'T' WORKING ON THE INTERNET

How often children needed help	9
How often children asked questions	9
How often children discussed what to do	6
How often children worked together	9
How often teacher asked questions	12
Mouse skills	Good control from all three
Keyboard skills	T: very good D: good knowledge of letters A: slow
Computer knowledge	D: said he never used a computer T: knows of the Internet A: only played games
Additional comments	Took a long time for them to find the information on the screen. The words were difficult for them. There was also less time available this week, but we still managed to get through the work.

What did the children learn?

Through these tasks, the children learned how to connect to the Internet, read through information and select the appropriate literature to answer the questions and to formulate their own. The children

had the opportunity to work as a team, discussing ideas and performing different tasks on the computer. They had the chance to address different audiences: their own group, other groups, ourselves, their class teacher and also the rest of the class who had not used the Internet.

Transcript made of the tape recorded conversation between three members of staff and seven children, evaluating the activities they had completed, as a group.

Q. (R) You have all worked with books and the Internet. Which method did you prefer?

A. (all) Internet

Q. Why?

A. (D) Because you can find a lot more than you can in books. There are more pictures as well.

(K) You can get a lot more information from the Internet than books, because instead of looking in lots of books, you can just look on the Internet.

(C) We had to do it loads of times.

(C) You did didn't you Your group had to go through the process lots of times.

Q. Did anyone think it was quite hard to use the Internet?

A. (A) Yes, because if you pressed something wrong you had to keep going back to do it again

(D) I thought it was hard, because like, beginners don't know how to do it, so that's how it was hard for me, and to find the right thing to get it on as well.

Q. So if you needed to find information quickly, which method do you think would be best?

A. (K) If you had loads of books right, you wouldn't know which book to look in

(M) I don't like reading a lot, well I do like reading, but when it comes to really hard words, I don't like reading.

(S) I like the Internet better.

(M) I like books better.

(D) I find it hard to remember what we did, but I write things down what I don't remember, and if its right then you can keep the piece of paper

Q. And would you like to use the Internet more often?

A. (all) Yes.

Q. The things you looked at on Britain since the 1930s were produced by another school. If you could produce you own pages, do you think this is a good idea?

A. (all) Yes

(K) You could test it out. If we did something and another school did something we can try it out their way, and they can try it our way.

(C) Yes that's a good idea.

(D) We could find out their information what we wrote, and they can find out the information what we wrote.

Q. If every school in the country had the Internet and produced their own pages on all the subjects you had in school, do you think that would be useful?

A. (all) Yes

Q. Why?

A. (A) Like art, it might give you tips on how to draw.

(D) and they might tell you about who the people who drew, and show you how to draw, as I already know.

(S) They can tell you about their country and find out about our country.

(C) That would be if the Internet was in every school all over the world wouldn't it?

(S) Yes

Q. What is the overall conclusion of Internet in schools?

A. (D) Get one while you can!

Q. How many of you would you prefer to use the Internet?

A. Six out of seven.

(M) I prefer books

Q. Do you think that if you were taught to use the computer properly, you would use it more?

A. (M) No.

Q. Would school be able to afford the Internet for everyone?

A. (A) You can get more information on the Internet.

(D) We think the Internet is a good idea, and I think that all schools should have it so we can create our own pages and get more information.

Evaluation

For our last session with the children, we grouped all the children together and set up an evaluation of all activities completed. This was so all the children had a chance to see what the other groups had achieved and to express their views on using the Internet in the classroom. This discussion was tape recorded so that we could listen to the tape afterwards, and reflect on the children's views. We found this session very valuable.

The Internet and the National Curriculum

The use of the Internet itself is not specified in the National Curriculum for Information Technology. However, we found many ways where it linked to our work. We focused upon:

discuss their experiences of using IT and assess its value in their working practices (1c)

investigate parallels with the use of IT in the wider world, consider the effects of such uses, and compare them with other methods (1d)

select suitable information and media . . . (2c)

interpret, analyse and check the plausibility of information held in IT systems, and select the elements required for particular purposes, considering the consequences of any errors. (2d)
(Information Technology in the National Curriculum, IT, Key Stage 2)

The children were asked questions which allowed them to express their feelings on the use of the Internet within the classroom. The general feeling we obtained of their use of the Internet was that it was good, better than using books and it was more interesting. The children thought that using it was exciting, and this way you remember facts more easily.

The excitement of search and discovery not only assist students widen their knowledge bases but also their confidence and self-esteem.

(Corbett, 1997)

The children felt that the pictures would have been better in colour. However, they only saw the graphics for one section of the Internet produced by children from another school.

We heard on Radio One on November 20th 1997, that a school in Texas had got rid all of their books, and each child had a laptop computer with connection to the Internet and CD-ROM. We asked the children what they thought of this. The initial reaction was that it was a good idea, but after some thought the children decided that books are still useful because of the stories and pictures. The conclusion was that the Internet should be used

Summary sheet of the key points when using the Internet in the classroom

- Familiarise yourself with the information on the Internet which you would like to use.
- Bookmark these pages.
- Create an instruction sheet for yourself, children and new users to use to get connected to the Internet.
- Create question sheets for the children to help them to search through the information for the answers.
- Think about timing. Take into consideration the connection to the Internet.
- Give the children the chance to create their own pages for the Internet. This will give them a great sense of achievement, and others can use them too.
- Consider the pages which are not suitable for children, maybe draw up a set of rules for using the Internet.

alongside the traditional sources of information.

Conclusion

On the tenth of October 1997, The Prime Minister announced that only one in five schools is connected to the Internet, and that by the year 2000, every school will be connected. At present the effectiveness of the Internet in supporting children's learning can be argued. The children find it exciting which helps them to learn because it is a practical activity, and something new. However, it can be frustrating at times. The range of information is extensive, but the teacher needs to search through it to find sites appropriate to the needs of their pupils. This involves a lot of time and patience on the part of the teacher. Teachers should all be given suitable training for use of information technology and the Internet. If used properly, the Internet will be very beneficial, useful and interesting in supporting the delivery of the National Curriculum

From our research, we have to conclude that the Internet is a good means of enriching children's learning, supporting as it does:

- ICT capability
- subject knowledge
- co-operative working

References

- Corbett, A. (1997) Unleashing the power of the Internet as a classroom learning tool. *Computer Education* 85, 14-17.
- Pollard, A. and Tann, S. (1987) *Reflective Teaching in the Primary School* (2nd Edition). London, Cassell.
- DFE (1995) *The National Curriculum*. London, HMSO.

Reviews

BETT 1999

By the time you read this, BETT 1999 will have been and gone. For those of you who have never visited the exhibition it is a veritable Aladdin's Cave of all that is good and new in Educational Technology. There is a full program of seminars which cater for teachers in every key stage and address current matters of concern in education.

Without doubt a visit to BETT is an exhilarating and exhausting experience, but one not to be missed.

New software

BlackCat has developed *Pick a Picture* – a simple data-base for early learners. Using pictures and icons instead of words, as well as pre-programmed starter topics (Ourselves, Homes, Weather and Minibeasts) should help to make datahandling accessible to all pupils.

Pick a Picture for PCs costs £40 for a five-user licence, or £75 for a ten-user licence.

Further information can be obtained from:

Sales, BlackCat Educational Software, Lion House, Bethel Square, Brecon, Powys, LD3 7JP.

Tel: 01874 622114; Fax: 01874 611604

email: sales@blackcatsoftware.com

Topologika has announced the release of *ScreenTurtle 3* for Acorn computers. This software has all the features of earlier versions plus much more, including full RISC OS drag-and-drop functionality plus network compatibility.

Users who purchased *Desktop ScreenTurtle* (version 2) in 1998 will qualify for a free upgrade. Other users should call for upgrade prices, or visit Topologika's website

<http://www.topolgka.demon.co.uk>.

A Windows implementation of the original version of *ScreenTurtle* is available (prices as below, or half price if ordered with the Acorn version), and the PC version 1 will be upgraded, in due course, to include all the features of version 3.

System requirements: RISC OS 3 with 2MB RAM.

Single user licence £45 + VAT;

Site licence £90 + VAT.

Further information from:

Topologika Software, Waterside House, Falmouth Road, Penryn, Cornwall TR10 8BE.
Tel: 01326 377771; Fax: 01326 376755

Information and Communications Technology in Primary Schools: Children or Computers in Control?

Richard Ager (1998)

David Fulton Publishers;

ISBN 1-85346-543-7; £15.00 (paperback).

'There is no point using ICT if children do not receive an enhanced learning experience.' (p. 16)

This is the basic premise of Richard Ager's book, which is aimed at providing an introduction to the use of ICT for teachers and trainee teachers in primary schools.

It should be perhaps made clear at the outset that, with deference to MAPE colleagues beyond the borders or across the sea, by 'primary schools' he really means English schools, and for early years colleagues that in turn also means rather more Key Stage 2 than Key Stage 1 or pre-school. This is not uncommon and in any case, the ideas and applications discussed could apply equally, and just as usefully, wherever the school is.

That said, the book gives a realistic view of what is happening and what is possible. You get the impression of someone who has been in a lot of primary classrooms and seen things from the teacher's angle too. The author knows what teachers have to do and face every day. He is supportive of needs of teachers but no less enthusiastic about the power of ICT to improve the quality of teaching and learning and to help children become more independent, autonomous learners.

The underlying structure of the book is based on exactly the sort of questions that teachers ask: Why all this concern about ICT? How can ICT be managed in the primary classroom? The ICT is there, but what about real learning? What are we really assessing and how should it be done? How can I find the time to do all this planning, assessing and recording?

Most chapters have useful summaries of the key points such as the 'Main teaching and learning issues'. He dips into some theoretical underpinnings too, from Vygotsky and Gardner, without going into great detail. On the practical side, there are plenty of examples and ideas, often based on projects and reports from NCET/BECTA, for activities in all subjects, for classroom management, assessment and writing that ICT policy. The book evidently pre-dates the current literacy and numeracy drives, and it does not give all the answers by any means, but there are enough good starting points and ideas for further development for both teachers and students.

Ager also adds fuel to the important debate of 'Children or Computers in Control'. ICT advocates invariably emphasise children being in control and

using content free applications creatively and effectively, to further independent learning. Many programs used in the classroom however don't allow that freedom. The idea of the computer being in control, so to speak, has developed from teaching machines into the integrated learning systems (ILS) of today. Ager maintains there is a place for computers 'managing' the learning and offering appropriate support. Not that he believes such systems should be used uncritically or to 'replace the teacher', but that they could offer a useful additional resource when teachers know how to use it effectively.

Another very useful insight is that of the levels of the teacher's ICT capability, or competences as we should say now. The DfEE requirements for initial teacher training currently sets new standards, which are likely to be the basis for all teachers by 2002. Ager mentions them briefly but also sets out four levels of practical competency. It starts with being 'unconsciously incompetent' (unaware of computers and their use in the curriculum), moving on to 'conscious incompetence' (looking into and reading about good practice), then 'conscious competence' (going on short courses and implementing some ICT activities in the classroom) and finally to 'unconscious competence' (integrating ICT as normal part of planning and curriculum activity). But, as he rightly points out, teachers can be at various stages for different areas of ICT. We all know of instances where the data handling is going well, but where is the control and sensing? Or of being 'unconsciously incompetent' about ILS or using the Internet.

The book tends to avoid jargon well but uses ICT terminology where needed. There may have been a quick 'search and replace' to change the ITs into ICTs in order to meet market needs, but he does give a good working definition of the difference between the two. The book certainly relates to the teaching and learning features of the latter and not the hardware concerns of the former. The writing does suffer in places from some errors and poor language, and although email and the Web are mentioned there is very little about their integration into the curriculum. Here is a book about ICT – and no URLs given at all!

Throughout the book there is an emphasis on acquiring ICT skills. Indeed, the chapter on the ICT and the Early Years focuses on the need to develop the technical skills of using the mouse and the keyboard. At the same time, another main teaching issue is to encourage enthusiastic, positive and reflective users of ICT but also reflective users. It is important to get children to think about why using the computer would be useful – indeed, as Ager suggests, only let them if they make a good case!

On the whole, this is a book to read, and to keep to hand if possible. It does not cover everything you need, but gives a really good start, with a good collection of thought-provoking ideas, practical examples and possible solutions for a whole range of tasks that face today's primary teachers. It is a book to dip into again and again. The enthusiasm for ICT comes through but it is also grounded in reality. 'The overriding question you, as a teacher, must ask is 'Why am I asking the child to do that?' (p. 74). That clearly applies to all teaching, but with good answers for ICT, the gains could be tremendous.

Barry Wake is a full-time student at University College Worcester

Language in Evidence

This new piece of software, for 8–16 year-olds, has been over 2 years in the making and gets its first public airing at the BETT '99 Show. It has been designed and produced by Cambridgeshire Software House in conjunction with the Schools Liaison Department of the Thames Valley Police and has been co-sponsored by MAPE. The software has several different aims and objectives and will be the subject of a much more detailed review in a later edition but the main points are listed below.

Aims

1. To help teachers and the Police to work together to help reduce the youth crime figures.
2. To provide a shell that children can interact with that will involve the use of language in different forms.
3. To provide teachers with a meaningful vehicle to teach children how to use email and the Internet.
4. To make children aware of the work undertaken by a police force and of the necessities to have one.

Program content

The software is available for the Windows '95 format, 16Mb RAM and is stored on a CD-ROM. It can be used in a variety of different ways, viz:

1. As a simple browser that looks at the various police departmental differences, the resources available and some background information. This is supported by the use of high quality photographs, movies and text and will provide enough opportunity to discuss what the role of the police is, etc.

2. As an interactive language based simulation. CSH have created an imaginary town that is inhabited by about 1000 people of all ages and social backgrounds. These people work and play, according to their personal tastes and characteristics, in some of the many businesses and leisure activities in the town. Crimes will be committed as the software runs and it is up to you to solve them! To help you, there are extensive databases to search, vehicle records, criminal records, eye witness statements to take and a wealth of teacher/child support material. Once you have found all the evidence you can present your case and, if all the evidence has been gathered, put your case forward for consideration etc. The simulation covers a period of 12 months and almost anything can happen in that time! In this part of the software CSH has included a number of 'Cases' that are fixed in the sense that they always happen when you run the program. These cover bullying, shoplifting, stealing from motor vehicles, drug abuse, arson and burglary. The cases provide ideal opportunities for discussion and debate in connection with their 'real world' counterparts and Thames Valley Police have provided statistical and factual information to help make these cases as true to life as is possible.

A brilliant touch is the email/Internet simulation. Within the program, each 'department' communicates internally using email. Messages need to be sent and replied to if the children are

to solve the crime. This is a really good way of teaching ALL children how to use email at nil cost. The CD also contains a simulated Internet that can be searched. That said and done, if you are running the software on a computer that does have a connection to the outside world, CSH have included hyperlinks to several REAL numbers. Children can actually send their own messages (in their own language) and get replies from a variety of people. I'll say no more about this because it will give the plot away but this one feature opens out all kinds of educational experiences in itself!

3. The resources. All of these can be printed. Included are very detailed factsheets on drugs, the history of our police force (with some lovely old photographs), activity sheets, puzzles, some very official looking forms to record your findings etc., and a whole variety of other useful bits of information.

Not only is the software an ideal resource for an extended piece of language work, it will fit into the literacy hour with ease.

The program costs £49.95 + carriage and VAT but MAPE members can purchase it at the Membership discount price of £29.95 + carriage and VAT. To qualify for your discount you MUST quote your MAPE Membership number when sending your order to Cambridgeshire Software House, P.O. Box 163, Huntingdon, Cambridgeshire, PE17 3UR. You can also fax an order to CSH on 01487 741213.

Free Geographical Resources on the Web from the Advisory Unit

In a drive to demonstrate its on-going support for Geography Teachers, the Advisory Unit has launched the *Aegis Newsletter* offering an *Aegis* Masterclass, a free web-based resource designed to help teachers to share their ideas and practical experience of *Aegis 2* (PC and Arc), the Advisory Unit's powerful Geographical Information Service for upper primary and secondary pupils.

Located at www.advisory-unit.org.uk/aegis/aegnews1.html, each masterclass details the objectives of the particular lesson plan, the topics covered, the classroom activities undertaken, as well as the Geography and IT skills developed. Users can also download maps, datafiles and worksheets used in the lessons.

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Site Seeing

The internet is without doubt a rich source of valuable information for teachers and children alike, but unless you are very experienced at searching it can be a time consuming and frustrating experience. Here are just a few sites worth a visit. If you chance upon another little gem make a note of it and let us know.

Schools

<http://www.sutton.lines.sch.uk>

(Road Ahead Prize – Winning Site 1998) Sutton on Sea

<http://www.rmpc.co.uk/eduweb/sites/loughin/index.html>

with information about their school and the Clowns and Travel Buddies projects.

Literacy

There is a whole wealth of material available to support literacy. This is only a small selection. A good place to start might be:

<http://www.yearofreading.org.uk/index.html>

Stories and poems for all ages

<http://www.geocities.com/Athens/Olympus/1333/kids.htm>

<http://www.candlelightstories.com/kids.asp>

<http://www.stringfairy.com>

<http://www.littleplanet.com>

<http://www.disney.com/DisneyBooks/Readastory/index.html>

<http://www.randomhouse.com/seussville/>

<http://chaos.trxinc.com/jmilne/Pooh/>

<http://darsie.ucdavis.edu/tales>

<http://prominence.com/java/poetry/>

Alphabet books

<http://www.mrtc.org/~twright/animals/grandad.htm>

Special needs

<http://www.pacificnet.net/~mandel/SpecialEducation.htm>

Key Stage 1 and 2 Science and Information Technology

The schemes of work for the National Curriculum programmes of study for primary science and information technology (Key Stages 1 and 2) are available on the Dfee website at:

<http://www.standards.dfee.gov.uk/schemes>

Net resources

And if anyone is interested in Net resources about using the Net for teaching and learning, there's Netskills, Netlearn and the Promoting the Web for Teaching sites as well as Internet Detective which is a tutorial aimed at helping you to evaluate the information you find.

<http://www.netskills.ac.uk>

<http://www.rgu.ac.uk/~sim/research/netlearn/callist.htm/>

<http://www.newcastle.ac.uk/tdf/>

<http://sosig.ac.uk/desire/internet-detective.html>

Other sites of interest

<http://www.foe@org.uk>

Friends of the earth

<http://www.zoomdinosaurs.com/>

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